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SECRETARY OF THE AIR FORCE**

AIR FORCE INSTRUCTION 11-2B-52V2

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Flying Operations

B-52—AIRCREW EVALUATION CRITERIA



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 10-9, *Lead Operating Command Weapon System Management*; AFD 11-2, *Aircraft Rules and Procedures*, and AFI 11-202V2, *Aircrew Standardization and Evaluation*. It provides guidance on the conduct of B-52 aircrew evaluations. It is applicable to all units/organizations that operate or have oversight of units that operate B-52 aircraft, and applies to commanders, operations supervisors and aircrew personnel assigned or attached to all flying activities of these units/organizations. This publication also applies to Air Force Reserve Command (AFRC) Units. This publication does not apply to the Air National Guard (ANG). NAFs will coordinate any supplements to this instruction with HQ AFGSC/A3BT before publication and forward one copy to HQ AFGSC/A3BT after publication. (T-2). Units will coordinate any supplements to this instruction with the next higher Numbered Air Force (NAF)/MAJCOM, as applicable, prior to publication, and forward one copy to said higher headquarters after publication. (T-2). Air Force Reserve Command (AFRC) units will provide a copy of any supplements to this instruction to their gaining MAJCOM and the active duty NAF with Stan/Eval oversight responsibility. (T-2). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional's chain of command.

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SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed. Major changes include the following: references for Radar Navigators (RN) and Navigators (N) removed and changed to Dual-Seat Navigator (DSN); optional copilot air refueling qualification requirements are relocated to **paragraph 2.3.3**. Air Refueling; guidance requiring a conventional weapons preflight in addition to the nuclear weapons preflight has been added; the applicability of the nuclear weapons preflight has been clarified; Weapons Closed Book test for Weapons Qualified Crewmembers has been added; and Emergency Procedures Evaluation (EPE) area grading criteria is relocated to **chapter 3**.

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Chapter 1

GENERAL INFORMATION

1.1. General. This instruction establishes guidance and procedures on the conduct of B-52 aircrew evaluations. All evaluations will be conducted in accordance with (IAW) the provisions of AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and this instruction. Information gathering documents will be established as forms in accordance with AFI 33-360, *Publications and Forms Management*.

1.2. Waivers. All requirements within this AFI are tiered to indicate the waiver authority.

1.2.1. Tier 0: The waiver authority is external to the Air Force (e.g. Congress, White House, FAA)

1.2.2. Tier 1: The waiver authority is the MAJCOM/CC, delegable no lower than MAJCOM Director, with the concurrence of the AFI Certifying Official.

1.2.3. Tier 2: The waiver authority is the MAJCOM/CC (delegable no lower than MAJCOM Director)

1.2.4. Tier 3: The waiver authority is the Wing/DRU/FOA/CC (delegable no lower than Group/CC or equivalent)

1.3. Procedures.

1.3.1. Flight Examiners (FEs) will use the evaluation criteria contained in Chapter 3 and Chapter 4 to conduct all flight, Aircrew Training Device (ATD), and Emergency Procedure Evaluations (EPE). (T-2). To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria. (T-2).

1.3.2. In order to ensure the most comprehensive and objective evaluation, the FE should not occupy a primary crew position during evaluations. However, if conditions warrant (e.g. DNIF crewmember), the flight examiner may occupy a primary crew position during an evaluation. While occupying a primary crew position, the FE will execute the duties of that position. (T-2).

1.3.3. The FE will explain the purpose of the evaluation and how it will be conducted prior to flight. (T-2). The examinee will accomplish all required mission planning in accordance with his/her crew position during the evaluation. (T-2). FEs will be furnished a copy of the necessary charts, flight logs, target folders, and any additional items he/she deems necessary. (T-2).

1.3.4. The FE will thoroughly debrief all aspects of the flight. (T-2). This debrief will include the examinee's overall rating, specific deviations, area grades assigned (if other than qualified), and any required additional training. (T-2).

1.4. Grading Instructions. Standards and performance parameters are contained in AFI 11-202, Volume 2 and this instruction.

1.4.1. Evaluation criteria are based on crewmember qualification as follows:

1.4.1.1. **(P)** is used to denote Pilots and Instructor Pilots.

1.4.1.2. (CP) is used to denote Copilots.

1.4.1.3. (DSN) is used to denote Dual Seat Navigators (DSN) and Instructor DSNs.

1.4.1.5. (E) is used to denote Electronic Warfare Officers.

1.4.1.6. Weapons Qualified Crewmembers (N/A AFMC). For purposes of this instruction, weapons qualified crewmembers include all pilots, DSNs and weapons school graduates.

1.4.2. The FE will base tolerances for in-flight parameters on conditions of smooth air. (T-2). Do not consider momentary deviations from tolerances provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. The FE will consider cumulative deviations when determining the overall grade. (T-2).

1.4.2.1. When grading criteria specify that airspeed will be evaluated and the flight manual lists only a minimum/maximum/recommended airspeed for that area, the examinee will brief the desired airspeed. (T-2).

1.4.3. The FE will compare examinee performance for each area accomplished during the evaluation with the standards provided in this volume and assign an appropriate grade for the area. (T-2). Determine the overall flight evaluation grade from the area grades based on a composite of the observed events and tasks IAW AFI 11-202, Volume 2, evaluator judgment, and this instruction.

1.4.3.1. FEs will use the grading criteria in this volume to determine individual area grades. (T-2). Exercise sound judgment when the wording of areas is subjective and when specific situations are not covered.

1.4.3.2. If the examinee receives an unqualified grade in any of the critical areas identified in this volume, the FE must assign an overall qualification level of 3. (T-2). If the examinee fails any ground requisite or receives an unqualified grade in any area, the FE must assign an overall qualification level of no higher than 2. (T-2). Otherwise, FE judgment is the determining factor in arriving at the overall grade.

1.4.3.3. The following general criteria apply during all phases of flight except as noted for specific events and instrument final approaches:

Table 1.1. General Criteria.

Q	Altitude	+/- 150 feet
	Airspeed	+/- 10 kts
	MACH	+/- .03
	Course	+/- 5 degrees/3 NM
	TACAN Arc	+/- 2 NM
	% MAC for T/O	+/- 1.0%
	Takeoff/Stopping Distance	+/- 500 feet
	Takeoff Trim	+/- .4 units
	EPR Settings	+/- .02
	Thrust Gate Setting	+/- 5 degrees
	S1 Time	+/- 1 sec
	All Computed Speeds	+/- 3 kts

Q-	Altitude	+/- 200 feet
	Airspeed	+/- 15 kts
	MACH	+/- .04
	Course	+/- 10 degrees/5 NM
	TACAN Arc	+/- 3 NM
	% MAC for T/O	+/- 1.5%
	Takeoff/Stopping Distance	+/- 700 feet
	Takeoff Trim	+/- .6 units
	EPR Settings	+/- .03
	Thrust Gate Setting	+/- 10 degrees
	S1 Time	+/- 1.5 sec
	All Computed Speeds	+/- 4 kts
U	Exceeded Q- Limits	

1.5. Written Examinations.

1.5.1. Closed Book.

1.5.1.1. General Knowledge. This exam consists of a minimum of 20 questions drawn from the AFGSC crew position-specific Master Question Files (MQFs). (T-2). Units may supplement this exam with unit/location-specific questions.

1.5.1.2. Weapons Closed Book. All weapons qualified crewmembers must pass a weapons closed book test with questions derived from all applicable missile or weapon directives specific to the individual's weapon qualification (e.g., pilots on jettison and weight and balance, DSNs on Offensive Avionics System [OAS] faults and jettison procedures). (T-2)

1.5.1.2.1. The pilot and EWO weapons closed book test will consist of a minimum of 20 questions. (T-2).

1.5.1.2.2. The DSN weapons closed book test will consist of a minimum of 30 Questions. (T-2). There will be at least 5 questions from each weapon MQF for which the crewmember is qualified. (T-2).

1.5.1.3. Boldface/Critical Action Procedures (CAPs). This exam requires the examinee to list the correct steps for each critical action emergency procedure applicable to the individual's crew position. (T-2). Verbatim responses are not required, but answers must be in the correct sequence and clearly state the intended course of action. (T-2).

1.5.2. Open Book.

1.5.2.1. Qualification Examination. This examination will consist of at least 50 questions derived from all applicable flight manuals and governing command directives. (T-2). Units may increase the number of questions to provide an in-depth evaluation of the examinee's knowledge.

1.5.2.2. Weapons Examination (Weapons Qualified Crewmembers). This exam consists of a minimum of 30 questions derived from all applicable missile or weapon directives specific to the individual's weapon qualification (e.g., pilots on jettison and weight and balance, DSNs on Offensive Avionics System [OAS] faults and jettison procedures). (T-

2). The weapons exam may be included in the Qualification Examination, but must be annotated as a separate ground event on the AF Form 8. (T-2).

1.5.3. Instrument Examination. This examination is part of the pilot instrument evaluation, and will consist of at least 50 questions drawn from the Instrument Examination SQB published by the Air Force Flight Standards Agency (AFFSA). (T-2).

1.6. Instructor Evaluations.

1.6.1. An instructor receiving an area grade of U or Q- with additional training in any graded area, must not perform instructor duties until additional training is complete. (T-2). This restriction will be placed in the comments section, and the YES block will be marked in restrictions. (T-2). If these grades are assigned in any instructor area, the overall grade will be 3 for the instructor portion. (T-2).

1.6.2. Complete all upgrade training requirements prior to this evaluation.

1.6.3. Only Formal Training Unit (FTU) instructors may receive evaluations with an FTU student in the pilot, copilot, radar navigator, navigator or electronic warfare officer positions. For FTU Instructor Electronic Warfare Officers (IE), this can fulfill the instructor portion of the checkride only.

Chapter 2

EVALUATION REQUIREMENTS

2.1. General.

2.1.1. All evaluations will follow the guidelines set in AFI 11-202, Volume 2. (T-2).

2.1.2. Flight phase requirements for all evaluations are shown in **Tables 2.1-2.3**. When conditions such as equipment malfunction, operational requirements, or weather, preclude evaluation of a particular event in-flight, it may be evaluated by an alternate method (e.g., ATD, Cockpit Procedures Trainer [CPT], or verbal evaluation) in order to complete the evaluation. Document the reason and type of alternate method used in the Comments portion of the AF Form 8, *Certificate of Aircrew Qualification*. If the FE determines the required item cannot be adequately evaluated by an alternate method, the examinee will require an additional flight to complete the evaluation. (T-2). ATDs will only be used for areas that are certified in AFI 11-2B-52V1, *B-52 Aircrew Training*, or the Ready Aircrew Program Tasking Memorandum. (T-2). Progress check sortie items may be used at the discretion of the evaluator to finish incomplete student FTU evaluations when an ATD or verbal completion is not appropriate. Specific procedures will be included in the unit supplement to AFI 11-202V2. (T-2).

2.1.3. For Combat Mission Ready (CMR) aircrew to complete an evaluation, all areas annotated with an "R" must be accomplished. (T-2). Basic Mission Capable (BMC) aircrew will be evaluated in only those areas in which they maintain qualification. (T-2). Strive to complete all evaluation requirements on one flight for efficiency.

2.1.4. Weapons Qualification. (N/A AFMC). All weapons qualified crewmembers will perform a Weapons Preflight and take a Weapons Open Book and Weapons Closed Book Examination that reflects the knowledge used in each crew position to employ weapons. (T-2). Weapons qualified crewmembers will accomplish a Nuclear and/or Conventional Weapons Preflight IAW paragraph 2.2.7, *Weapons Preflight*. (T-2).

2.1.5. Dual Seat Qualification. The following guidance clarifies how dual seat qualifications are earned and retained.

2.1.5.1. DSN Evaluations. DSNs will demonstrate duties applicable to the RN and N positions. (T-2). The examinee may be evaluated in the opposite seat in the ATD if these duties are not demonstrated in flight. Most evaluation areas can be evaluated in either seat. As a minimum, DSNs will be evaluated in both seats in the following areas: (T-2).

2.1.5.1.1. Area 7. CRUISE/NAVIGATION.

2.1.5.1.2. Area 10. EQUIPMENT OPERATIONS.

2.1.5.1.3. Area 12. CREW COORDINATION.

2.1.5.1.4. Area 13. AIR REFUELING.

2.1.5.1.5. Area 21. KNOWLEDGE.

2.1.5.1.6. Area 48. WEAPONS EMPLOYMENT.

2.1.5.2. Dual Seat Pilot Evaluations.

2.1.5.2.1. Initial Dual Seat Pilot Evaluations. Non-instructor pilots, who are current and qualified in the right seat, may become dual seat qualified on their initial left seat checkride if they demonstrate an instrument approach (2.1 or 34) to a touch-and-go in the right seat. If the evaluation is completed without meeting this requirement, the examinee will only be qualified in the left seat until an instrument approach to a touch-and-go is successfully evaluated in the right seat. (T-2). If an examinee gains dual seat qualification during a SPOT evaluation, that qualification will only be valid until the end of the examinee's current Instrument (INSTM)/ Qualification (QUAL) evaluation, regardless of when the SPOT evaluation was administered. (T-2).

2.1.5.2.2. Recurring Dual Seat Pilot Evaluations. During recurring dual seat pilot evaluations, the examinee may fly the evaluation in either seat and perform an instrument approach (area 33 or 34) to a touch-and-go in the opposite seat. If an examinee gains or regains dual seat qualification during a SPOT evaluation, that evaluation will only be valid until the end of the examinee's current INSTM/QUAL evaluation, regardless of when the SPOT evaluation was administered. (T-2).

2.1.6. Preplanned Mission Data. When using a staff agency-derived flight plan, fuel log, etc., do not grade the examinee for those portions computed by the staff. Initial data input is the responsibility of the individual developing the mission planning products. (T-2). However, the examinee is responsible to ensure the data used in the aircraft is accurate and effective for mission accomplishment. (T-2)

2.1.7. Currency of Flight Publications. On flight evaluations, all issued technical orders, checklists, and publications required for the flight will be checked for currency and accuracy. (T-2). When unit-maintained publications are used in-flight, the examinee will ensure currency and suitability for flight. (T-2). The unit supplement to AFI 11-202V2 may specify additional publications to be checked.

2.1.7.1. Electronic Flight Bags (EFB). The examinee is responsible for the currency of all publications, technical orders, checklists and FLIP (if applicable) required for flight. (T-2). Examinees are required to ensure that the EFB is configured IAW the current EFB Concept of Employment (CONEMP). (T-2)

2.2. Instrument/Qualification or Qualification Evaluation. A mission flown according to instrument flight rules best fulfills the objective of the INSTM/QUAL evaluation. This evaluation may be administered on any compatible training mission.

2.3. Mission Evaluation. MSN evaluation will be flown IAW current tactics, unit tasking and theater Area of Responsibility scenarios and will incorporate all appropriate evaluation requirements from **Table 2.1- 2.3.** (T-2). Scenarios that represent unit DOC tasking or current Air and Space Expeditionary Force (AEF) requirements satisfy the requirements of this evaluation. Provide the employment scenario IAW AFI 11-415, *Weapons and Tactics Program, Attachment 3*, and include (as a minimum): intelligence scenario, orders of battle (electronic and air), commander's intent, strike mission objectives and Special Instructions (SPINS). The scenario portion of the flight need not encompass the entire sortie, but must include at least one weapon event. (T-2). When SPINS are not available or used, use command guidance from appropriate instructions. (T-2). Evaluations during exercises or deployments are not prohibited;

however, units should apply operational risk management principles to the scheduling of the evaluation. Real world contingencies may provide a unique opportunity to conduct evaluations; however, factors beyond the control of the examinee and FE may preclude its successful completion.

2.3.1. Minimum ground phase requisites are:

2.3.1.1. EPE (if MSN evaluation is stand-alone evaluation. See Chapter 4). (T-2)

2.3.1.2. Open Book and Closed Book weapons examination (Weapons Qualified Crewmembers). (T-2)

2.3.1.3. Weapons Preflight (Weapons Qualified Crewmembers). (T-2)

2.3.1.3.1. Crewmembers who are nuclear Combat Mission Ready (CMR-N), nuclear Basic Mission Capable (BMC-N), or in training to become CMR-N or BMC-N will perform a preflight of an inert/training nuclear weapon or War Reserve (WR) asset and a conventional weapon. (T-2). This includes Formal Training Unit (FTU) instructors who instruct nuclear weapons employment. All others will accomplish a conventional weapon preflight. (T-2). Document weapons preflight in the ground phase section of the AF Form 8 as Nuclear Weapons Preflight or Conventional Weapons Preflight with the associated grade of 1 or 3.

2.3.1.4. ATD Evaluation. (E) Accomplish the ATD evaluation for all mission evaluations and annotate the date and grade (1, 2, or 3) in the ground phase section of the AF Form 8. An examinee receiving a grade of 3 (unqualified) will be placed on supervised status IAW AFI11-202v2 paragraph 5.7. (T-2).

2.3.1.4.1. The ATD evaluation will cover all areas annotated with “R” under the ATD column in **Table 2.3**. (T-2). The exercise must include, but is not limited to, analyzing one system malfunction, a fighter attack (forward and/or rear hemisphere), and the penetration of high and/or low altitude threat areas according to the mission scenario. (T-2). The exercise should have appropriate types and density of threats, which accurately reflect a typical unit OPLAN. The examinee’s EPE may be accomplished concurrently in this ATD mission. Each unit will have a minimum of two different check missions. (T-2). Unit stan/eval will ensure that all threats and threat modes presented in check missions are represented in continuation training ATD missions. (T-2).

2.3.2. Air Refueling. The evaluation will include the following areas applicable to the examinee’s crew position: air refueling communication, air refueling rendezvous (any type) with a tanker aircraft, aircraft control, descent, contact, fuel management and transfer, visual signals (may be done verbally if necessary), post refueling, and breakaway. (T-2). At the discretion of the assigned/attached flying squadron commander, copilots may qualify in air refueling procedures during any in-flight (initial, recurring, or SPOT) evaluation by meeting the provisions of **paragraph 2.3.2.2** below. If a copilot gains air refueling qualification during a SPOT evaluation, the qualification will only be valid until the end of the examinee’s current MSN evaluation, regardless of when the SPOT evaluation was administered. (T-2). Air refueling tracks will allow at least 30 minutes of air refueling per pilot, and 15 minutes per copilot (if applicable). (T-2). Deviations from this requirement are permissible only when tanker/bomber formation ratio or length of the published air refueling track prohibits

compliance. However, each examinee must have sufficient time to meet requirements in [2.3.2.1](#) and [2.3.2.2](#) below. (T-2). Air refueling practice emergency separation procedures must be initiated with the receiver in contact or in the refueling envelope. (T-2). Grade buddy rendezvous procedures using the formation criteria. (T-2).

2.3.2.1. **(P)** . Ten minutes of contact time for recurring and 20 minutes of contact time for initial qualification evaluations must be completed within 30 minutes after initial astern/pre-contact position. (T-2)

2.3.2.2. **(CP)** Five minutes of contact time must be completed within 15 minutes after initial astern/pre-contact position (if applicable). (T-2).

2.3.3. Terrain Avoidance (TA). (If applicable) (P/CP/DSN) Requirements include a TA Functional check, at least 10 minutes terrain avoidance with an operational TA system, and at least 10 minutes terrain avoidance utilizing integrated Electro-Optical Viewing System (EVS)/visual contour procedures. (T-2). Conduct TA in mountainous routes when possible.

2.3.4. Weapons Employment Requirements.

2.3.4.1. Weapons employment classes are defined as: unguided (e.g. GP, B-61, or B-83, etc.) and guided (e.g., JDAM, WCMD, LGB, ALCM, CALCM, MALD and JASSM). Units will design written mission evaluation profiles using current tactics, unit tasking and theater Area of Responsibility (AOR) scenarios and will incorporate all evaluation requirements. (T-2). Scenarios that represent unit DOC tasking satisfy the requirements of this evaluation. Design profiles to evaluate training, flight position, special qualifications, and basic airmanship. Initial mission evaluations should be given IAW the applicable FTU syllabus.

2.3.4.2. Aircrew should demonstrate proficiency in both guided and unguided weapons employment; however, only one is required to complete an evaluation. (T-2)

2.3.4.2.1. Guided conventional or nuclear weapon employment consists of direct or indirect engagement scenarios using weapons such as JDAM, WCMD, LGB, CALCM, MALD, JASSM, or ALCM. Direct engagement scenarios typically involve man-in-the-loop decisions and limited standoff range. Indirect engagement scenarios typically involve autonomous systems and increased standoff range. Either direct or indirect guided weapons employment is acceptable.

2.3.4.2.2. Unguided weapons employment consists of conventional or nuclear scenarios using weapons such as GP, B-61, or B-83.

2.3.4.3. Conditions permitting, use Emission Control (EMCON) procedures and techniques to the maximum extent possible and use threat avoidance/evasive action techniques as directed by the employment scenario.

2.3.4.4. Grade each release of unguided gravity weapons separately. Any type of scoring is acceptable, however, for actual weapons deliveries, range scoring is preferred.

2.3.4.5. For TA qualified crewmembers, an unguided gravity release should be accomplished at TA altitudes.

2.3.4.5.1. **(DSN)** . When weather or equipment malfunctions preclude bombing at TA altitude, configure the radar scope in TA sector (except when optimum

presentation requires another setting), use TA procedures, and accomplish the run at minimum safe altitude/instrument flight rules altitude. If equipment malfunctions preclude synchronous capability, alternate bombing meets the requirements of the evaluation.

2.3.5. Electronic Countermeasures Requirements (E). The examinee will accomplish at least one electronic attack (EA) run. (T-2). To the maximum extent possible, the run should be scheduled against a Multiple Threat Emissions Systems (MUTES) capable site. The flight examiner may, during mission planning for mission evaluations, select another MUTES scenario that reflects the unit DOC tasking or AOR. For no-notice evaluations, scheduled scenario(s) may be changed by the examinee to a Sierra, Tango, or Mike scenario.

2.3.5.1. Flight examiners will not consider EW performance as less than qualified based solely on unreliable/substandard scores. (T-2).

2.4. Formal Course Evaluation. Aircrew evaluations conducted as part of a formal FTU training syllabus will be flown IAW AFI 11-202V2 and [Table 2.1](#) of this document. (T-2).

2.5. Instructor Evaluation.

2.5.1. All flying personnel selected for instructor duty must be evaluated to determine their judgment, technical knowledge, instructor ability (including error analysis of student activity), and use of grading documents as well as proficiency in their aircrew specialty. (T-2). All evaluation areas will be evaluated during all instructor evaluations. (T-2). Initial instructor evaluations may be accomplished in conjunction with INSTM/QUAL/MSN evaluations.

2.5.2. Instructors must demonstrate proficiency by instructing a student or qualified individual acting as a student. (T-2). The evaluator may require the examinee to present verbal explanations of equipment operations, procedures, and techniques pertinent to crew specialty duties and responsibilities.

2.5.3. Initial Flight evaluation. To initially qualify as an instructor, flying personnel selected for instructor duty must successfully complete an initial instructor evaluation. (T-2). This is a one-time evaluation in which the examinee must demonstrate ability to instruct in some phase of the unit's mission. (T-2). Except for requirements delineated in **Chapter 3, Area 25, Instructor Performance**, specific profiles and/or events will be determined by the flight examiner. (T-2).

2.5.4. Subsequent aircrew evaluations (i.e. INSTM/QUAL/MSN) will include instructor portions during the evaluations. (T-2).

2.5.5. Instructor Pilot Requirements. Instructor Pilots who were not previously dual seat qualified will occupy the right seat during their initial instructor evaluation for takeoff, air refueling, initial buffet, and all traffic pattern activity. (T-2). Previously qualified dual seat pilots may occupy either seat for their initial instructor evaluation for the events listed above. Instructor pilots must demonstrate the ability to instruct in mission accomplishment as well as flying the aircraft as described below. (T-2).

2.5.5.1. Initial buffet and recovery demonstration in-flight. For recurring evaluations, this event may be accomplished in the ATD as part of the EPE.

2.5.5.2. Air refueling boom envelope limit demonstration. Contact time may be reduced to 5 minutes excluding the time required to demonstrate boom envelope limits. Inadvertent disconnect tolerances are not applicable during demonstration of boom envelope limits. On recurring evaluations, the boom limit demonstration is desired, but may be waived at the discretion of the evaluator.

2.5.5.3. Accomplish EP patterns as directed in **paragraph 2.2.2**.

2.5.6. Instructor DSN Requirements. Instructor evaluations may be conducted in-flight or in the ATD. The examinee will thoroughly brief, conduct, and critique a profile representative of the unit's DOC. (T-2).

2.5.6.1. Documentation of Initial or Requalification Instructor DSN Evaluation. If the evaluation is conducted in the ATD, enter the Instructor ATD, date and grade (1 or 3) under the ground phase side of the AF Form 8. If the instructor portion is accomplished in-flight, enter the Instructor evaluation, date and grade (1 or 3) under the flight phase side of the AF Form 8.

2.5.7. Instructor Electronic Warfare Officer Requirements. Instructor evaluations will be accomplished in the ATD, except as outlined in **paragraph 1.6.4**. (T-2). Use unit-specific missions to evaluate the instructor (except FTU instructors). Enter Instructor ATD, date, and grade (1 or 3) under the ground phase on the AF Form 8. On all instructor evaluations the student will not be evaluated. (T-2).

2.6. Reporting Deviations/Discrepancies by Unlike Specialty. Evaluators must report deviations/discrepancies within their aircraft from established procedures/directives in any area, regardless of the individual's crew specialty, to the Operations Group Standardization/Evaluation (OGV) for evaluation and necessary action. (T-2). If the deviation/discrepancy is found to warrant overall Qualification Level 3 AF Form 8 documentation, annotate SPOT in the Flight Phase block. The Chief of OGV will sign as the flight examiner. (T-2).

2.6.1. For formation purposes, evaluators of like or unlike specialty in other aircraft within the formation who observe deviations/discrepancies affecting the overall safe conduct of the formation will report such deviation/discrepancy to OGV for evaluation and necessary action. (T-2). If AF Form 8 documentation is warranted, use the procedures in **paragraph 2.6**.

2.7. Crew Compartment Spot Evaluations. When an individual in a crew compartment is receiving an evaluation, the other compartment individual will (if qualified) receive a SPOT evaluation. (T-2). Only annotate SPOT when the evaluation does not update the individual's expiration date. Individuals that wish to realign based upon a SPOT evaluation must declare their intent on mission planning day or prior to stepping to the aircraft for a no-notice SPOT evaluation. Annotate the type of evaluation given (i.e., INSTM/QUAL/MSN not SPOT) in the Flight Phase. (T-2).

Table 2.1. Pilot Evaluations.

AREA	NOTE	AREA TITLE	INSTM/QUAL	MISSION
GENERAL				
1		MISSION PLANNING	R	R
2		BRIEFING	R	R

3		PRETAKEOFF	R	R
4	1	TAKEOFF	R	
5	1	DEPARTURE	R	
6	1	LEVEL OFF	R	
7		CRUISE/NAVIGATION	R	
8		FORMATION		
9		IN-FLIGHT CHECKS	R	R
10		EQUIPMENT OPERATION	R	R
11		COMM/IFF/SIF PROCEDURES	R	R
12		CREW RESOURCE MANAGEMENT	R	R
13	3	AIR REFUELING		R
14	1	DESCENT	R	
15		GO-AROUND	R	
16		EMERGENCY TRAFFIC PATTERNS	R	
17		VFR PATTERN/APPROACH	R	
18	4	LANDING	R	
19		AFTER-LANDING	R	
20		DEBRIEFING/CRITIQUE	R	R
21		KNOWLEDGE	R	R
22	*	AIRMANSHIP/SITUATIONAL AWARENESS	R	R
23	*	SAFETY	R	R
24	*	AIRCREW DISCIPLINE	R	R
25	3	INSTRUCTOR PERFORMANCE	R	R
INSTRUMENT				
31	2	HOLDING	R	
32	1	INSTRUMENT PENETRATION/ENROUTE DESCENT	R	
33	5	PRECISION APPROACH	R	
34	5	NON-PRECISION APPROACH	R	
35		MISSED APPROACH/CLIMB OUT	R	
36		CIRCLING/SIDESTEP APPROACH		
37		INSTRUMENT CROSS-CHECK	R	
TACTICAL EMPLOYMENT				
41		TACTICAL PLAN		R
42		TACTICAL EXECUTION		R
43		COMPOSITE FORCE INTERFACE (If applicable)		
44		RADIO TRANSMISSION/ INTERPHONE-USAGE AND DISCIPLINE		R
45		INGRESS		R
46		LOW ALTITUDE NAVIGATION (If applicable)		R
47		TA-INTEGRATED EVS/VISUAL PROCEDURES (If applicable)		R
48		WEAPONS EMPLOYMENT		R
49		WEAPONS EMPLOYMENT C2 (If applicable)		R
51		RANGE PROCEDURES		R
52		EGRESS		R
53		TRAINING RULES/ROE		R

60		EMCON PROCEDURES		R
EMERGENCY PROCEDURES EVALUATIONS /BOLDFACE ACTION PROCEDURES				
201		ENGINE FIRE ON THE GROUND	R	
202		WHEEL BRAKE SYSTEM FAILURE	R	
203		ABORT	R	
204		RUNAWAY OR UNSCHEDULED STAB TRIM	R	
205		COMPLETE FAILURE OF ALL GENERATORS	R	
206		PRESSURIZED COMPARTMENT FIRE	R	
207		EMERGENCY ENGINE SHUTDOWN	R	
208		UNSCHEDULED AUTOPILOT INPUTS	R	
209		UPWARD / DOWNWARD EJECTION	R	R
NON-BOLDFACE ACTION PROCEDURES /GROUND EMERGENCIES/MALFUNCTIONS				
210		HOT START		
211		LOSS OF EXTERNAL POWER		
212		HUNG START		
213		GENERATOR CIRCUIT BREAKER OPEN		
214		ANT-ICE INOPERATIVE		
215		GROUND TEST PUMPS INOP		
216		RUDDER ELEVATOR - NO COOLING		
217		NO START		
218		OTHER - GROUND		
TAKEOFF / IN-FLIGHT EMERGENCIES/MALFUNCTIONS				
220		YAW CHANNEL FAILURE		
221		FLAP MALFUNCTION		
222		GEAR FAILURE TO RETRACT		
223		CABIN PRESSURIZATION FAILURE		
224		SLIPWAY DOOR MALFUNCTION		
225		FUEL MALFUNCTION		
226		OIL MALFUNCTION		
227		AIRSPED INDICATOR FAILURE		
228		ENGINE AIR STARTING		
229		AIR REFUELING MALFUNCTION		
230		COMPRESSOR STALLS		
231		HYDRAULIC MALFUNCTIONS		
232		ELECTRICAL MALFUNCTION		
233		OTHER – TAKEOFF/INFLIGHT		
LANDING EMERGENCIES/MALFUNCTIONS				
240		GEAR FAILURE TO EXTEND		
241		LANDING WITH PARTIAL GEAR		
242		LANDING WITH HYDRAULIC FAILURE		

243		SPOILER CONTROL FAILURE		
244		FLAP MALFUNCTION		
245		LANDING WITH STAB TRIM OUT		
246		RUDDER ELEVATOR OUT LANDING		
247		FUEL IMBALANCE		
248		1 OR 2 ENGINE OUT LANDING		
249		3 OR 4 ENGINE OUT LANDING		
250		OTHER – LANDING		
INSTRUMENT / QUALIFICATION				
264		INITIAL BUFFET		
265		OTHER - INSTRUMENT/QUALIFICATION		
266		UNUSUAL ATTITUDES	R	
301		WEAPON JETTISON		R
Notes:				
*Indicates a critical area.				
1. Accomplish either a Takeoff/Departure or an Instrument Penetration/Enroute Descent. Published letdown and departures for low altitude routes may also be used.				
2. Holding may be accomplished in the ATD.				
3. On recurring IP evaluations, boom limit demonstration is desired, but may be waived at evaluator discretion.				
4. All pilots must perform at least one touch-and-go. (T-2). Dual seat pilots will perform one in each seat. (T-2).				
5. On recurring IP evaluations, only one instrument approach (Precision or Non-Precision) is required at the discretion of the evaluator. (T-2).				

Table 2.2. DSN Evaluations.

AREA	AREA TITLE	QUAL	MISSION
GENERAL			
1	MISSION PLANNING	R	R
2	BRIEFING	R	R
3	PRETAKEOFF	R	R
4	TAKEOFF	R	
5	DEPARTURE	R	
6	LEVEL OFF		
7	CRUISE/NAVIGATION	R	
8	FORMATION		
9	IN-FLIGHT CHECKS	R	R
10	EQUIPMENT OPERATION	R	R
11	COMM/IFF/SIF PROCEDURES	R	R
12	CREW RESOURCE MANAGEMENT	R	R
13	AIR REFUELING		R
14	DESCENT	R	
19	AFTER-LANDING	R	
20	DEBRIEFING/CRITIQUE	R	R
21	KNOWLEDGE	R	R
22	*AIRMANSHIP/SITUATIONAL AWARENESS	R	R
23	*SAFETY	R	R
24	*AIRCREW DISCIPLINE	R	R
25	INSTRUCTOR PERFORMANCE	R	R
TACTICAL EMPLOYMENT			
41	TACTICAL PLAN		R

42	TACTICAL EXECUTION		R
43	COMPOSITE FORCE INTERFACE		
44	RADIO TRANSMISSION/ INTERPHONE-USAGE AND DISCIPLINE		R
45	INGRESS		R
46	LOW ALTITUDE NAVIGATION (If applicable)		R
47	TA-INTEGRATED EVS/VISUAL PROCEDURES (If applicable)		R
48	WEAPONS EMPLOYMENT		R
49	WEAPONS EMPLOYMENT C2		R
50	TARGETING POD OPERATION (If applicable)		
51	RANGE PROCEDURES		R
52	EGRESS		R
53	TRAINING RULES/ROE		R
60	EMCON PROCEDURES		R
AIRCREW NUCLEAR EVALUATIONS			
104	SAFE ESCAPE PROCEDURES		R
105	AIRBORNE RADAR DIRECTED APPROACH		R
EMERGENCY PROCEDURES EVALUATIONS /BOLDFACE ACTION PROCEDURES			
206	PRESSURIZED COMPARTMENT FIRE	R	R
209	UPWARD / DOWNWARD EJECTION	R	R
NON-BOLDFACE ACTION PROCEDURES/MALFUNCTIONS			
301	WEAPON JETTISON	R	R
302	WEAPON MALFUNCTION	R	R

Table 2.3. Electronic Warfare Officer Evaluations.

AREA	AREA TITLE	QUAL	MISSION	ATD
GENERAL				
1	MISSION PLANNING	R	R	
2	BRIEFING	R	R	
3	PRETAKEOFF	R	R	
5	DEPARTURE	R		
7	CRUISE/NAVIGATION	R		
8	FORMATION			
9	IN-FLIGHT CHECKS	R	R	
10	EQUIPMENT OPERATION	R	R	R
11	COMM/IFF/SIF PROCEDURES	R	R	
12	CREW RESOURCE MANAGEMENT	R	R	
13	AIR REFUELING		R	
14	DESCENT	R		
19	AFTER-LANDING	R		
20	DEBRIEFING/CRITIQUE	R	R	
21	KNOWLEDGE	R	R	
22	*AIRMANSHIP/SITUATIONAL AWARENESS	R	R	
23	*SAFETY	R	R	
24	*AIRCREW DISCIPLINE	R	R	
25	INSTRUCTOR PERFORMANCE	R	R	
TACTICAL EMPLOYMENT				
41	TACTICAL PLAN		R	

42	TACTICAL EXECUTION		R	R
43	COMPOSITE FORCE INTERFACE (If applicable)			
44	RADIO TRANSMISSION/ INTERPHONE-USAGE AND DISCIPLINE		R	R
45	INGRESS		R	R
46	LOW ALTITUDE NAVIGATION (If applicable)			
48	WEAPONS EMPLOYMENT		R	
49	WEAPONS EMPLOYMENT C2		R	
51	RANGE PROCEDURES		R	
52	EGRESS		R	R
53	TRAINING RULES/ROE		R	
54	THREAT IDENTIFICATION		R	R
55	PENETRATION PROCEDURES		R	R
56	EXPENDABLE PROCEDURES		R	R
57	THREAT COUNTER-MEASURES		R	R
58	ACQUISITION/COMMUNICATION COUNTERMEASURES		R	R
59	WITHDRAWAL PROCEDURES		R	R
60	EMCON PROCEDURES		R	R
EMERGENCY PROCEDURES EVALUATIONS /BOLDFACE ACTION PROCEDURES				
206	PRESSURIZED COMPARTMENT FIRE	R	R	
209	UPWARD / DOWNWARD EJECTION	R	R	
*Indicates a critical area.				

Chapter 3

EVALUATION CRITERIA

3.1. General Grading Standards.

3.1.1. The grading criteria in this chapter is divided into five sections: General, Instrument, Tactical Employment, Aircrew Nuclear Evaluations, and Emergency Procedures. Use all sections for criteria applicable to the events performed on the evaluation.

3.1.2. Evaluation areas designated by (P) apply to pilots, (CP) applies to copilots, (DSN) applies to dual-seat qualified offense crewmembers in either the Radar Navigator or Navigator positions, and (E) applies to Electronic Warfare Officers. All other areas are common to all crewmembers.

3.1.3. Where major areas are divided into sub areas, only one grade will be assigned to the major areas. (T-2). Discrepancies on the back of the AF Form 8 will be annotated by sub area. (T-2).

3.2. General.

3.2.1. Area 1--Mission Planning.

3.2.1.1. Mission Preparation.

3.2.1.1.1. Q. Clearly defined the mission overview and goals. Developed a sound plan to accomplish the mission. Provided specific information on what is needed to be accomplished. Solicited feedback from other crewmembers to ensure understanding of mission requirements. Thoroughly critiqued plans to identify potential problem areas and ensured all crew/flight members understood possible contingencies. Checked all factors applicable to mission in accordance with applicable directives. When required, extracted necessary information from air tasking order. Thoroughly considered options to conserve fuel during all phases of flight. Read and signed-off all required Flight Crew Information Files (FCIF), read files, and Go/No Go items. Prepared at briefing time.

3.2.1.1.2. Q-. Failed to adequately define the mission overview and goals. Failed to adequately address potential problem areas. Failed to effectively solicit feedback or critique the plans to ensure understanding of mission requirements and possible contingencies. Minor error(s) or omission(s) detracted from mission effectiveness, but did not affect overall mission accomplishment. Failed to consider any options to conserve fuel during the mission. Demonstrated limited knowledge of performance capabilities or approved operating procedures/rules in some areas.

3.2.1.1.3. U. Failed to define the mission overview and goals. Lack of specific information on required items. Failed to solicit feedback or critique plans to ensure understanding of mission requirements and possible contingencies. Major error(s) or omission(s) would have prevented a safe or effective mission. Displayed unsatisfactory knowledge of operating data or procedures. Failed to review or sign off required Go/No Go items. Not prepared at briefing time.

3.2.1.2. Publications.

3.2.1.2.1. Q. Flight manual publications were current. Contained only minor deviations, omissions and/or errors that did not impact effective and safe accomplishment of the mission; safety of flight was not compromised.

3.2.1.2.2. Q-. Flight manual publications contained deviations, omissions and /or errors that impacted mission accomplishment but not safety of flight.

3.2.1.2.3. U. Not up to Q-. standards. Flight manual publications contained major deviations, omissions and/or errors, or safety of flight was compromised.

3.2.2. Area 2—Briefing.

3.2.2.1. Organization.

3.2.2.1.1. Q. Well organized and included all applicable information. Briefed crew/flight member responsibilities and mission priorities. Concluded briefing in time to allow for formation briefing (if applicable).

3.2.2.1.2. Q-. Events out of sequence, hard to follow, some redundancy. Not fully prepared for briefing.

3.2.2.1.3. U. Confusing presentation, poorly organized and not presented in a logical sequence. Failed to allow time for formation briefing (if applicable). Failed to brief required areas.

3.2.2.2. Presentation.

3.2.2.2.1. Q. Presented briefing in a professional manner, addressed all applicable items. Effectively used available briefing aids. Crew/flight members clearly understood mission requirements.

3.2.2.2.2. Q-. Some difficulty communicating clearly. Failed to make effective use of available briefing aids. Dwelled on nonessential mission items.

3.2.2.2.3. U. Failed to conduct/attend required briefings. Failed to use available briefing aids. Redundant with lack of continuity. Lost focus of crewmembers. Demonstrated lack of knowledge of subject. Presentation created doubts or confusion.

3.2.2.3. Mission Objectives.

3.2.2.3.1. Q. Established effective mission objectives based upon performance, conditions, and standards. Air Force Tactics, Techniques, and Procedures (AFTTP) 3-3.B-52, *Combat Aircraft Fundamentals*, and governing directives.

3.2.2.3.2. Q-. Objectives, though established, did not effectively contribute to mission accomplishment.

3.2.2.3.3. U. Failed to establish effective mission objectives based upon performance, conditions, and standards.

3.2.3. Area 3--Pre-Takeoff (Includes all activity up to crossing the hold line).

3.2.3.1. Procedures.

- 3.2.3.1.1. Q. Established and adhered to station, start engine, taxi times to assure thorough preflight, check of personal equipment, crew briefing, weapons preflight (if applicable) etc. Performed all checks and procedures prior to takeoff in accordance with approved checklists and applicable directives. Unplanned deviations were out of the examinee's control.
- 3.2.3.1.2. Q-. Minor deviations, omissions, and/or errors occurred that did not detract from mission effectiveness, performance, and/or knowledge was the minimum acceptable.
- 3.2.3.1.3. U. Omitted major item(s) of the appropriate checklist. Major deviations in procedure, which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to an ineffective or degraded mission.
- 3.2.3.2. **(Weapons Qualified Crewmembers) Weapons Preflight.** The intent of weapons preflight evaluation is to accurately reflect each crewmembers responsibilities in employing weapons. It is expected that pilots will emphasize proper aircraft loading and that DSNs will focus on proper weapons configuration, but both will be verbally evaluated to ensure a sufficient level of knowledge to provide for safe and effective weapons employment. (T-2). Weapons preflight may be evaluated on actual weapon release and tactical ferry sorties. Weapons preflight on an actual weapons release sortie may satisfy the Conventional or Nuclear Weapons Preflight (if applicable) ground phase requisite of the MSN evaluation, if not previously accomplished. Although DSNs have primary responsibility for weapons preflight IAW current technical order procedures, weapons qualified personnel are responsible for cross checking and ensuring proper procedures are followed. (T-2).
- 3.2.3.2.1. In the event that a grade of 3 is awarded for weapons preflight, the overall grade for the MSN evaluation will be no higher than 2. (T-2).
- 3.2.3.2.2. Q. Accomplished all checklist items without any deviations. For nuclear weapons preflights, two crewmembers form a two-person team and complete the checklist using challenge and response on all items.
- 3.2.3.2.3. U. Not up to Q standards. (Conventional or Nuclear) Checklist deviations, omissions, and/or errors that could preclude effective weapons delivery or cause the examinee to takeoff with an improper weapons load.
- 3.2.4. Area 4--(P/CP/DSN) Takeoff (crossing hold line through flap retraction).
- 3.2.4.1. Q. Accomplished prescribed procedures and checklists in accordance with the flight manual and governing directives.
- 3.2.4.1.1. **(P/CP)** . Smooth aircraft control throughout takeoff. Performed takeoff in accordance with flight manual procedures. Airspeeds were within tech order tolerances.
- 3.2.4.1.2. **(DSN)** . Called expiration of S1 time within 1 second (Navigator primary, RN backup).
- 3.2.4.2. Q-. Minor flight manual procedural or deviations.

3.2.4.2.1. **(P/CP)** . Some under or over control at liftoff.

3.2.4.2.2. **(DSN)** . Called expiration of S1 time within 1.5 seconds (Navigator primary, RN backup).

3.2.4.3. U.

3.2.4.3.1. **(P/CP)** . Takeoff potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

3.2.4.3.2. **(RN/N)** . Not up to Q- standards.

3.2.5. Area 5--Departure (includes all activity from flap retraction up to and including initial level-off).

3.2.5.1. Q. Performed departure as published/directed and complied with all restrictions. Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently.

3.2.5.2. Q-. Minor deviations in airspeed and navigation occurred during completion of departure. Minor omissions, deviations, and/or errors in procedures detracted from overall mission efficiency.

3.2.5.3. U. Failed to comply with published/directed departure instructions. Major omissions, deviations, and/or errors in procedures.

3.2.6. Area 6--(P/CP/) Level-Off.

3.2.6.1. Q. Levelled off smoothly. Promptly established proper cruise airspeed.

3.2.6.2. Q-. Level-off was erratic. Exceeded Q limits (Table 1.1). Slow in establishing proper cruise airspeed.

3.2.6.3. U. Level-off was extremely erratic. Exceeded Q- limits (**Table 1.1**). Excessive delay or failed to establish proper cruise airspeed.

3.2.7. Area 7--Cruise/Navigation (includes all high altitude navigation).

3.2.7.1. Q. Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned airspace. Altitude deviations did not exceed +/-150 feet from published or briefed altitude. Made all control times within 2 ½ minutes of briefed or published tolerances. At no time allowed the aircraft to deviate more than three nautical miles from planned course.

3.2.7.1.1. **(DSN)** . Annotation of in-flight mission paperwork made mission reconstruction possible. Advised pilot of altitude deviations prior to exceeding +/- 150 feet of deviation.

3.2.7.1.2. **(E)** . Procedures were accomplished according to the flight manual and governing directives with only minor deviations, omissions, or errors.

3.2.7.2. Q-. Minor errors in procedures or use of navigation equipment. Maintained time control within five minutes of briefed or published tolerances. Slow to comply with clearance instructions. Demonstrated difficulty in establishing exact position and course.

Performance demonstrated a lack of knowledge or ability that could have affected mission accomplishment.

3.2.7.2.1. **(DSN)** . Advised the pilots of altitude deviations prior to exceeding +/- 200 feet of deviation.

3.2.7.2.2. **(E)** . Procedures were accomplished with deviations, omissions, or errors demonstrating the minimum acceptable knowledge or performance.

3.2.7.3. **U**. Major errors in procedures or use of navigation equipment. Failed to establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Failed to remain within the confines of assigned airspace. Exceeded parameters for Q-.

3.2.7.3.1. **(E)** . Procedures were accomplished with deviations, omissions, or errors demonstrating unacceptable knowledge or performance.

3.2.8. Area 8--Formation (includes formation join-up, en route procedures, and position changes, if accomplished).

3.2.8.1. Flight Lead.

3.2.8.1.1. **Q**. Established and maintained appropriate formations utilizing published and briefed procedures. Maintained positive control of flight. Planned ahead and made timely decisions. Ensured wingman position and adherence to formation standards and deconfliction contracts. Effectively coordinated with other flight members throughout the mission. Ensured smooth and efficient flight operation.

3.2.8.1.1.1. **(P/CP)** . Made smooth and immediate position corrections and considered the wingman appropriately.

3.2.8.1.2. **Q-**. Made minor deviations from published and/or briefed procedures. Demonstrated limited flight management. Failed to always plan ahead and/or hesitant in making decisions. Flight coordination was adequate to accomplish the mission. Deficiencies in communication or interaction resulted in degraded flight or mission efficiency.

3.2.8.1.2.1. **(P/CP)** . Maneuvered excessively, making it difficult for wingman to maintain position.

3.2.8.1.3. **U**. Formation flight not accomplished in accordance with published and/or briefed procedures. Failed to establish appropriate formations. Provided little consideration for wingman. Indecisive. Failed to ensure wingman maintained proper position. Failed to maintain deconfliction contracts. Poor flight coordination seriously degraded mission accomplishment or safety of flight.

3.2.8.2. Wingman.

3.2.8.2.1. **Q**. Maintained position in accordance with published and briefed procedures with only momentary deviations. Maintained appropriate separation and complied with leader's instructions. Smooth and timely rejoin. Contributed to smooth and efficient flight operations and maintained mutual support throughout the mission

3.2.8.2.1.1. **(P/CP)** . Demonstrated smooth and immediate position corrections.

3.2.8.2.1.2. **(DSN)** . Provided the pilot with timely position advisories of all aircraft in the formation when requested, or when encountering IMC (unless mission requirements inhibit). Advised the pilot of position errors within 150 feet of altitude and/or one-half mile.

3.2.8.2.2. Q-. Minor deviations from published procedures. Slow to comply with leader's instructions. Varied position considerably. Minor Errors in performing assigned flight tasks.

3.2.8.2.2.1. **(P/CP)** . Over-controlled. Slow to join-up.

3.2.8.2.2.2. **(DSN)** . Advised the pilot of position errors within 200 feet and/or three-quarters of a mile.

3.2.8.2.3. U. Failed to conduct formation flight in accordance with published and/or briefed procedures. Failed to comply with leader's instructions. Unable to maintain a formation position. Failed to maintain deconfliction contracts. Rejoin was unsafe. Poor flight coordination seriously degraded mission accomplishment or safety of flight.

3.2.8.2.3.1. **(P/CP)** . Abrupt position corrections. Failed to maintain safe separation.

3.2.8.2.3.2. **(DSN)** . Exceeded Q- standards.

3.2.9. Area 9--In-flight Checks.

3.2.9.1. Q. Performed all in-flight checks as required.

3.2.9.2. Q-. Minor deviations, errors, or omissions during checks. Did not detract from mission accomplishment. Performance and/or knowledge was the minimum acceptable.

3.2.9.3. U. Failed to perform in-flight checks or monitor systems to the degree that conditions could have been favorable for an emergency to develop, or could have severely degraded mission accomplishment.

3.2.10. Area 10--Equipment Operation.

3.2.10.1. Q. Operated equipment IAW flight manuals and governing directives. Accurately and efficiently analyzed equipment malfunctions with consistent reliable mission results. No damage or significant system degradation resulted from operator inputs or lack of knowledge.

3.2.10.2. Q-. Operated equipment with minor deviations, omissions, and/or errors from flight manual and governing directive procedures. Equipment malfunctions were consistently ignored, analyzed in error, or caused by erroneous data insertion or faulty operator techniques. Deviations, omissions, and/or errors in malfunction analysis, prescribed procedures, or faulty techniques caused a degradation of equipment performance. The level of performance or knowledge consistently resulted in marginal reliability. Did not damage equipment.

3.2.10.3. U. Exceeded Q- standards. Failed to recognize equipment malfunction(s) which resulted (or would have resulted) in equipment damage due to circumstances

within the operator's control. Failed to obtain effective results due to poor operational techniques or procedures.

3.2.11. Area 11--Communication/IFF/SIF Procedures.

3.2.11.1. Q. Complete knowledge of and compliance with correct Comm/IFF/SIF procedures. Transmissions were concise, accurate and utilized proper terminology. Complied with all required instructions and acknowledged all communications. Asked for/provided clarification when necessary. Thoroughly familiar with communications security requirements, HAVE QUICK and secure voice equipment (if applicable).

3.2.11.2. Q-. Minor deviations, errors or omissions from correct procedures, required retransmissions or resetting of codes that did not significantly detract from situational awareness, threat warning or mission accomplishment. Slow in initiating or missed several required calls. Transmissions contained extraneous information, were not in proper sequence or used nonstandard terminology. Slow to acknowledge some communications. Slow to ask for/provide clarification when necessary. Demonstrated limited knowledge of communications security requirements, HAVE QUICK and secure voice equipment (if applicable).

3.2.11.3. U. Errors or omissions significantly detracted from situational awareness, threat warning or mission accomplishment. Failed to acknowledge multiple communications. Failed to ask for/provide clarification when necessary. Failed to display adequate knowledge of communications security requirements.

3.2.12. Area 12--Crew Resource Management (CRM).

3.2.12.1. Q. Effectively coordinated with other crewmembers during all phases of the mission. Identified, planned, and executed alternate mission activity in response to in-flight contingencies. Actively sought other crewmember opinions and ideas. Recognized and requested assistance when task-saturated. Effectively prioritized multiple tasks and effectively used available resources, ensuring smooth mission execution.

3.2.12.2. Q-. Lack of coordination with other crewmembers resulted in minor deviations, omissions, delays, confusion, degraded weapons delivery and/or crew situational awareness. Slow to identify, plan or execute alternate mission activities in response to contingencies. Slow to recognize task saturation and request assistance. Lack of effective task prioritization/use of resources resulted in degraded mission execution.

3.2.12.3. U. Not up to Q- standards. Failure of effective CRM severely degraded mission accomplishment and/or jeopardized safety.

3.2.13. Area 13--Air Refueling--(P/CP/DSN).

3.2.13.1. Air Refueling Rendezvous.

3.2.13.1.1. Q. Rendezvous effectively accomplished using proper procedures. Demonstrated effective use of radio communications. Used proper communication procedures for briefed Emission Control level.

3.2.13.1.1.1. (DSN) . Positively identified the tanker on Radar or in the EVS, and effectively positioned the aircraft behind the tanker in a timely manner.

3.2.13.1.2. Q-. Rendezvous delayed by improper techniques, procedures, or radio communications.

3.2.13.1.3. U. Not up to Q- standards. Failed rendezvous as a result of improper procedures. Demonstrated a lack of knowledge or familiarity with air refueling procedures. Poor judgment resulted in gross overshoot, excessive time in trail or jeopardized mission execution. Attempted rendezvous with the wrong aircraft or failed to find the correct tanker in formation.

3.2.13.2. **(P/CP)** Air Refueling Procedures (If applicable).

3.2.13.2.1. Q. Used proper procedures. Expeditious contact. Aircraft control was smooth and positive during tanker rendezvous and refueling. Refueled with no more than three (two for recurring checks or copilot air refueling qualification checks) pilot-induced disconnects.

3.2.13.2.2. Q-. Used proper procedures. Slow to contact. Rough aircraft control during rendezvous and refueling. Refueled with no more than four (three for recurring checks or copilot air refueling qualification checks) pilot-induced disconnects.

3.2.13.2.3. U. Exceeded Q-limits Unable to safely accomplish air refueling.

3.2.13.2.4. **(P/CP)** Breakaway.

3.2.13.2.4.1. Q. Used correct procedures. Expeditious separation from tanker.

3.2.13.2.4.2. Q-. Minor procedural errors. Slight delay in attaining separation that, did not compromise safety or damage equipment.

3.2.13.2.4.3. U. Failed to demonstrate knowledge of and/or failed to use proper procedures. Failed to attain timely separation from tanker.

3.2.14. Area 14--Descent (from the start of enroute descent or departure from the IAF for published penetrations through the final approach fix [P/CP] or landing [DSN]).

3.2.14.1. Q. Performed descent as directed and complied with all restrictions. Accurately and efficiently accomplished applicable procedures and checklists.

3.2.14.1.1. **(P/CP)** Computed and used an optimal start-descent point.

3.2.14.1.2. **(DSN)** . Informed pilots of airspeed deviations of -5/+10 knots, altitude deviations prior to exceeding +/-150 feet of deviation, and assigned heading +/- 5 degrees.

3.2.14.2. Q-. Performed descent as directed with minor deviations. Accomplished procedures and checklists required by the flight manual and governing directives with minor omissions, deviations, or errors.

3.2.14.2.1. **(P/CP)** . Failed to compute or use an optimal start-descent point.

3.2.14.2.2. **(DSN)** . Informed pilots of airspeed deviations of -10/+15 knots, altitude deviations prior to exceeding +/-200 feet of deviation, and assigned heading +/-10 degrees.

3.2.14.3. U. Exceeded Q- limits. Failed to demonstrate knowledge of flight manual and governing directive procedures. Procedures accomplished with major deviations, omissions and/or errors.

3.2.14.3.1. (DSN) . Exceeded Q- limits. Failed to advise pilot of unannounced descent below Minimum Descent Altitude (MDA)/Decision Height (DH) in excess of 50 feet.

3.2.15. Area 15--(P/CP) Go-Around.

3.2.15.1. Q. Promptly initiated and performed go-around IAW flight manual and governing directives. Airspeed tolerances are:

3.2.15.1.1. Flaps Down. +/-10 KIAS.

3.2.15.1.2. No-Flap. +10/-0 KIAS.

3.2.15.2. Q-. Slow to initiate go-around or procedural steps. Airspeed tolerances are:

3.2.15.2.1. Flaps Down. +/-15 KIAS.

3.2.15.2.2. No-Flap. +15/-5 KIAS.

3.2.15.3. U. Exceeded Q- limits. Failed to self-initiate go-around when appropriate or directed. Techniques unsafe or applied incorrect procedures. Erratic aircraft control. Large deviations in runway alignment.

3.2.16. Area 16--(P/CP) Emergency Traffic Patterns.

3.2.16.1. Q. Performed emergency procedures IAW flight manuals and governing directives. Prioritized actions to safely recover the aircraft. Maintained aircraft control within standards. Airspeed tolerances are:

3.2.16.1.1. Flaps Down. +/-10 KIAS.

3.2.16.1.2. No Flap Airspeed. +10/-0 KIAS.

3.2.16.2. Q-. Performed emergency procedures with minor deviations, omissions, and/or errors from applicable directives, did not jeopardize the safe recovery of the aircraft. Airspeed tolerances are:

3.2.16.2.1. Flaps Down. +/-15 KIAS.

3.2.16.2.2. No Flap Airspeed. +15/-5 KIAS.

3.2.16.3. U. Exceeded Q- limits. Major deviations, omissions, and/or errors in the performance of emergency procedures. Failed to safely recover the aircraft.

3.2.17. Area 17--(P/CP) Visual Flight Rules (VFR) Pattern/Approach.

3.2.17.1. Q. Patterns/approaches performed IAW flight manual procedures, Terminal Instrument Procedures (TERPS) and governing directives. Smooth aircraft control with accurate runway alignment. Maintained proper airspeed (+10/-5 knots).

3.2.17.2. Q-. Patterns/approaches performed with minor deviations, omissions, and or errors from flight manual procedures, TERPS and governing directives. Inconsistent aircraft control with minor deviations in runway alignment. Slow to correct to proper airspeed (+15/-10 knots).

3.2.17.3. U. Exceeded Q- limits. Failed to perform patterns/approaches IAW flight manual procedures, TERPS and governing directives. Erratic aircraft control with large errors in runway alignment.

3.2.18. Area 18--(P/CP) Landing.

3.2.18.1. Full Stop Landing.

3.2.18.1.1. Q. Landings performed IAW flight manual procedures and governing directives. Smooth aircraft control with accurate runway alignment. Touched down within the desired touchdown zone.

3.2.18.1.2. Q-. Landings performed with only minor deviations, omissions, and/or errors from flight manual procedures and governing directives. Inconsistent aircraft control with minor deviations in runway alignment. Touched down within the first 3000 feet of the runway.

3.2.18.1.3. U. Exceeded Q- limits. Failed to perform landings IAW flight manual procedures and governing directives. Erratic aircraft control with large deviations in runway alignment. Failed to touch down within the first 3000 feet of the runway.

3.2.18.2. Touch-and-go.

3.2.18.2.1. Q. Touch-and-go landings performed IAW flight manual procedures and governing directives. Smooth aircraft control with accurate runway alignment. Touched down within the desired touchdown zone.

3.2.18.2.2. Q-. Touch-and-go landings performed with only minor deviations, omissions, and/or errors from flight manual procedures and governing directives. Inconsistent aircraft control with minor deviations in runway alignment. Touched down within the first 3000 feet of the runway

3.2.18.2.3. U. Exceeded Q- limits. Failed to perform touch-and-go landings IAW flight manual procedures and governing directives. Erratic aircraft control with large deviations in runway alignment.

3.2.19. Area 19--After Landing (includes activities from final landing to crew debrief/critique).

3.2.19.1. Q. After-landing checklists and aircraft taxi procedures accomplished IAW the flight manual and governing directives. Required forms completed accurately.

3.2.19.2. Q-. After landing checklists and/or aircraft taxi performed with minor deviations, omissions and/or errors. Required forms completed with minor deviations, omissions, and/or errors.

3.2.19.3. U. Exceeded Q- limits. After landing checklists and/or aircraft taxi performed with major deviations, omissions and/or errors. Safety of the aircraft was jeopardized. Required forms completed inaccurately or omitted.

3.2.20. Area 20--Debriefing/Critique.

3.2.20.1. Q. Thoroughly debriefed the mission. Correctly analyzed mission results with respect to established objectives. Provided specific, objective, non-threatening, positive and negative feedback on team and individual performance. Debriefed deviations and

identified root causes. Offered corrective guidance as applicable. Thoroughly debriefed breakdowns in deconfliction contracts, roles and responsibilities. Asked for inputs from other mission participants, recapped key points and provided specific ways to correct errors.

3.2.20.2. Q-. Limited debriefing. Discussion of performance relative to mission objectives was limited. Specific, non-threatening, positive and negative feedback on individual and team performance was inconsistent. Mission deviations were not debriefed in sufficient detail. Failed to seek input from mission participants. Recap of key points was incomplete or inadequate and did not consistently provide specific ways to correct errors.

3.2.20.3. U. Failed to correctly debrief mission deviations or offer corrective guidance. Used excessive time to debrief. Failed to debrief breakdowns in deconfliction contracts, roles and responsibilities. Failed to provide non-threatening positive and negative feedback during debriefing. Failed to seek input from other mission participants. Failed to recap key mission points or provide specific ways to correct errors.

3.2.21. Area 21--Knowledge. Evaluate all applicable sub areas.

3.2.21.1. Aircraft General.

3.2.21.1.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations, and performance characteristics.

3.2.21.1.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.

3.2.21.1.3. U. Failed to demonstrate satisfactory knowledge of aircraft systems, limitations or performance characteristics.

3.2.21.2. Emergency Procedures.

3.2.21.2.1. Q. Correct, immediate response to boldface and non-boldface emergency situations. Effectively used checklist(s)/flight manual(s).

3.2.21.2.2. Q-. Response to boldface emergencies 100% correct. Response to certain areas of non-boldface emergencies or follow-on steps to boldface procedures were slow/confused. Used the checklist(s)/flight manual(s) when appropriate, but slow to locate required data.

3.2.21.2.3. U. Failed to perform correct boldface actions for emergency situation(s). Failed to analyze problems or take corrective action. Failed to use checklist(s)/flight manual(s), or lacks acceptable familiarity with its arrangement or contents.

3.2.21.3. Flight Rules/Procedures.

3.2.21.3.1. Q. Thorough knowledge of flight rules and procedures.

3.2.21.3.2. Q-. Deficiencies in depth of knowledge.

3.2.21.3.3. U. Failed to demonstrate satisfactory knowledge of flight rules and procedures.

3.2.21.4. Weapons/Tactics/Threats.

3.2.21.4.1. Q. Thorough knowledge of all aircraft weapons systems, weapons effects, tactics and threats applicable to the unit mission.

3.2.21.4.2. Q-. Demonstrated a limited knowledge or comprehension of weapons systems, weapons effects, tactics and threat knowledge that would not preclude successful mission accomplishment.

3.2.21.4.3. U. Failed to demonstrate a satisfactory knowledge of weapons, tactics and threats that contributed to ineffective mission accomplishment.

3.2.21.5. Local Area Procedures.

3.2.21.5.1. Q. Demonstrated thorough knowledge of local procedures.

3.2.21.5.2. Q-. Demonstrated a limited knowledge of local procedures.

3.2.21.5.3. U. Failed to demonstrate adequate knowledge of local procedures.

3.2.21.6. Nuclear Plans/Alert Procedures (If applicable).

3.2.21.6.1. Q. Demonstrated adequate knowledge of plans applicable to the unit mission. Thoroughly familiar with alert procedures and contingencies.

3.2.21.6.2. Q-. Demonstrated limited knowledge or comprehension of plans or alert procedures applicable to the unit.

3.2.21.6.3. U. Failed to demonstrate sufficient knowledge of plans/alert procedures to ensure effective mission accomplishment.

3.2.22. Area 22--Airmanship/Situational Awareness (Critical).

3.2.22.1. Q. Executed the assigned mission in a timely and efficient manner. Conducted the flight with a sense of understanding and comprehension. Made appropriate decisions based on available information. Recognized the need for action. Aware of performance of self and other flight-/crew members. Aware of on-going mission status. Recognized, verbalized and correctly acted on unexpected events.

3.2.22.2. U. Decisions, poor judgment or lack thereof, resulted in failure to accomplish the assigned mission. Failed to properly analyze flight conditions and/or failed to recognize/understand mission developments. Failed to recognize the need for action. Failed to maintain awareness of self and crew performance. Failed to maintain situational awareness, recognize, verbalize and act upon unexpected events.

3.2.23. Area 23--Safety (Critical).

3.2.23.1. Q. Aware of and complied with all safety factors required for safe aircraft operations and conduct of the mission.

3.2.23.2. U. Failed to comply with all safety factors required for operations or conduct of the mission. Failed to correctly accomplish boldface procedures. Failed to operate the aircraft or equipment in a safe manner.

3.2.23.2.1. (P/CP) . Failed to adequately clear.

3.2.24. Area 24--Aircrew Discipline (Critical).

3.2.24.1. Q. Provided required direction/information. Correctly adapted to meet new situational demands. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

3.2.24.2. U. Failed to provide direction/information when needed. Failed to correctly adapt to meet new situational demands. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or regulations.

3.2.24.2.1. (E) . Jammed restricted frequencies. Momentary or unintentional spillover jamming of restricted frequencies will be condoned if the EWO took reasonable precautions to avoid it and immediately removed jamming.

3.2.25. Area 25--Instructor Performance.

3.2.25.1. Briefing/Debriefing.

3.2.25.1.1. Q. Provided a comprehensive, instructional briefing/debriefing that encompassed all mission events. Excellent use of training aids and references. Provided excellent analysis of all events/maneuvers. Provided clearly defined objectives. Feedback was specific, objective, positive and negative based upon observable performance. Recapped key points, compared mission results with objectives, and shared operational knowledge and experience.

3.2.25.1.2. Q-. Minor deviations, omissions and/or errors. Analysis of events or maneuvers occasionally unclear. Feedback was inconsistent and did not facilitate a positive learning environment. Mission highlights covered but not in sufficient detail.

3.2.25.1.3. U. Major errors or omissions in briefing/debriefing. Failed to completely and clearly analyze events or maneuvers. Failed to effectively use available training aids/reference material. Failed to define instruction objectives. Failed to provide effective feedback. Failed to conduct briefing/debriefing.

3.2.25.2. Demonstration of Maneuvers/Equipment Operation.

3.2.25.2.1. Q. Performed required maneuvers or procedures within prescribed parameters. Provided concise, meaningful in-flight commentary. Demonstrated sound instructor proficiency.

3.2.25.2.2. Q-. Performed required maneuvers or procedures with minor deviations from prescribed parameters. In-flight commentary was sometimes unclear.

3.2.25.2.3. U. Failed to properly perform required maneuvers or procedures. Made major procedural errors. Failed to provide in-flight commentary. Demonstrated below-average instructor proficiency.

3.2.25.3. Instructor Knowledge.

3.2.25.3.1. Q. Demonstrated in-depth knowledge of procedures, requirements, aircraft systems and performance characteristics, mission, and tactics beyond that expected of non-instructors.

3.2.25.3.2. Q-. Deficiencies noted in the depth of knowledge, comprehension of procedures, requirements, aircraft systems/performance characteristics, mission or tactics.

3.2.25.3.3. U. Unfamiliar with procedures, requirements, aircraft systems/performance characteristics, mission, or tactics. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.

3.2.25.4. Training/Evaluation Forms Preparation.

3.2.25.4.1. Q. Completed appropriate training/evaluation records accurately. Adequately assessed and recorded performance. Comments were clear and pertinent.

3.2.25.4.2. Q-. Minor errors or omissions in training/evaluation records. Comments were incomplete or slightly unclear.

3.2.25.4.3. U. Failed to complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.

3.2.25.5. Ability to Instruct.

3.2.25.5.1. Q. Demonstrated sound instructor/evaluator ability. Clearly defined all mission requirements and any required additional training/corrective action. Instruction/evaluation was accurate, effective, and timely. Was completely aware of aircraft/mission situation at all times.

3.2.25.5.2. Q-. Problems in communication or analysis degraded effectiveness of instruction/evaluation.

3.2.25.5.3. U. Demonstrated inadequate ability to instruct/evaluate. Unable to perform, teach, or assess techniques, procedures, systems use, or tactics. Failed to remain aware of aircraft/mission situation at all times.

3.2.25.6. Initial Buffet--(IP).

3.2.25.6.1. Q. Thoroughly briefed restrictions and recovery procedures. Accomplished setup and recovery in a safe manner. Provided quality instruction during the maneuver.

3.2.25.6.2. Q-. Deficiencies in knowledge of initial buffet demonstration procedures. Failed to thoroughly brief restrictions and recovery procedures. Performed the maneuver with minor omissions or errors that did not jeopardize safety. Provided minimal instruction during maneuver.

3.2.25.6.3. U. Maneuver not performed to Q- standards. Maneuver had the potential to jeopardize safety. Note: Initial Buffet will be graded in-flight on initial IP evaluations. (T-2). Initial buffet may be graded during the EPE in the WST on recurring IP evaluations.

3.2.26. Areas 26-30--Not used.

3.3. Instrument.

3.3.1. Area 31--(P/CP) Holding.

3.3.1.1. Q. Performed entry and holding procedures IAW applicable directives. Holding pattern limit exceeded by not more than: leg timing +/-15 seconds, TACAN +/-2 NM.

3.3.1.2. Q-. Minor deviations to procedures or directives. Holding pattern limit exceeded by not more than: leg timing +/-20 seconds, TACAN +/-3 NM.

3.3.1.3. U. Exceeded Q- criteria. Failed to perform holding IAW published procedures and directives.

3.3.2. Area 32--(P/CP) Instrument Penetration/Enroute Descent: (Initial Approach Fix to Final Approach Fix/Descent Point) or enroute descent (radar vectors to final approach).

3.3.2.1. Q. Performed the penetration/enroute descent and approach as published/directed and IAW applicable flight manuals. Complied with all restrictions. Made smooth and timely corrections.

3.3.2.1.1. (P/CP) . TACAN arc: +/-2 NM.

3.3.2.2. Q-. Performed the penetration/enroute descent and approach with minor deviations. Complied with all restrictions. Slow to make corrections.

3.3.2.2.1. (P/CP) . TACAN arc: +/-3 NM.

3.3.2.3. U. Performed the penetration/enroute descent and approach with major deviations. Erratic corrections.

3.3.3. Area 33--Precision Approach (Instrument Landing System [ILS]/Precision Approach Radar [PAR])—(P/CP).

3.3.3.1. Q. Performed procedures as directed and IAW applicable flight manual. Smooth and timely response to controller's instructions (PAR) and to azimuth and glide slope (ILS). Complied with decision height. Position would have permitted a safe landing. Maintained glide path with only minor deviations.

3.3.3.1.1. Airspeed +/-10 kts.

3.3.3.1.2. Heading within 5 degrees of controller's instructions (PAR).

3.3.3.1.3. Glide Slope/Azimuth within one dot (ILS).

3.3.3.1.4. Initiated missed approach (if applicable) at decision height.

3.3.3.2. Q-. Performed procedures with minor deviations. Slow to respond to controller's instructions. Position would have permitted a safe landing. Improper glide path control.

3.3.3.2.1. Airspeed +15/-10 kts.

3.3.3.2.2. Heading within 10 degrees of controller's instructions (PAR).

3.3.3.2.3. Glide Slope within one dot low/two dots high (ILS).

3.3.3.2.4. Azimuth within two dots (ILS).

3.3.3.2.5. Initiated missed approach (if applicable) at decision height, +50/-0 ft.

3.3.3.3. U. Performed procedures with major deviations. Failed to respond to controller's instructions (PAR). Erratic corrections. Exceeded Q- limits. Failed to comply with decision height and/or position would not have permitted a safe landing. Erratic glide path control.

3.3.4. Area 34--(P/CP) Non-Precision Approach.

3.3.4.1. Q. Adhered to all published/directed procedures and restrictions. Used appropriate descent rate to arrive at MDA at or before Visual Descent Point (VDP)/Missed Approach Point (MAP). Position would have permitted a safe landing.

3.3.4.1.1. Airspeed +10/-5 kts.

3.3.4.1.2. Heading ± 5 degrees (ASR).

3.3.4.1.3. Course ± 5 degrees at MAP.

3.3.4.1.4. Localizer less than one dot deflection.

3.3.4.1.5. Minimum Descent Altitude +100/-0 feet.

3.3.4.1.6. Timing +/-10 secs.

3.3.4.2. Q-. Performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Position would have permitted a safe landing. Slow to correct to proper/briefed parameters.

3.3.4.2.1. Airspeed +15/-10 kts.

3.3.4.2.2. Heading ± 10 degrees (ASR).

3.3.4.2.3. Course ± 10 degrees at MAP.

3.3.4.2.4. Localizer within two dot deflection.

3.3.4.2.5. Minimum Descent Altitude +150/-50 feet.

3.3.4.2.6. Timing +/- 20 secs.

3.3.4.3. U. Exceeded Q- limits. Failed to comply with published and directed procedures or restrictions. Maintained steady-state flight below the MDA even though the 50 foot limit was not exceeded. Unable to land safely from the approach. Note: The -50 foot tolerance applies only to momentary deviations.

3.3.5. Area 35--(P/CP) Missed Approach/Climb-Out.

3.3.5.1. Q. Executed missed-approach/climb-out as published/directed. Completed all procedures IAW applicable flight manual.

3.3.5.2. Q-. Executed missed approach/climb-out with minor deviations. Slow to comply with published procedures, controller's instructions, or flight manual procedures.

3.3.5.3. U. Executed missed-approach/climb-out with major deviations, or failed to comply with applicable directives.

3.3.6. Area 36--(P/CP) Circling/Side-Step Approach.

3.3.6.1. Q. Performed circling/side-step approach in accordance with procedures outlined in the flight manual and AFMAN 11-217V1, *Instrument Flight Procedures*, AFMAN 11-217V2, *Visual Flight Procedures* and AFMAN 11-217V3, *Supplemental Flight Information*. Aircraft control was positive and smooth. Proper runway alignment. Airspeed: +10/-5 KIAS.

3.3.6.2. Q-. Performed circling/side-step approach with minor deviations to procedures outlined in the flight manual and AFMAN 11-217 volumes 1 - 3. Aircraft control was

not consistently smooth, but safe. Variations in runway alignment, but go-around not required. Airspeed: +15/-10 KIAS.

3.3.6.3. U. Circling/side-step approach not performed in accordance with procedures outlined in the flight manual and AFMAN 11-217 volumes 1 - 3. Erratic aircraft control. Large deviations in runway alignment requiring go-around.

3.3.7. Area 37--(P/CP) Instrument Cross-Check.

3.3.7.1. Q. Effective instrument cross-check. Smooth and positive aircraft control throughout flight. Meets .Q. criteria listed in General Criteria, applicable special events or instrument final approaches.

3.3.7.2. Q-. Slow instrument cross-check. Aircraft control occasionally abrupt to compensate for recognition of errors. Meets .Q-. criteria listed in General Criteria, applicable special events or instrument final approaches.

3.3.7.3. U. Inadequate instrument cross-check. Erratic aircraft control. Exceeded Q-limits.

3.3.8. Area 38-40--Not used.

3.4. Tactical Employment.

3.4.1. Area 41--Tactical Plan.

3.4.1.1. Q. Realistic, well-developed plan that encompassed mission objectives, threats, and capabilities of all flight members. Addressed contingencies in development of plan.

3.4.1.2. Q-. Minor deviations, omissions, and/or errors in the plan resulted in less than optimum achievement of objectives and detracted from mission effectiveness. Planned tactics resulted in unnecessary difficulty.

3.4.1.3. U. Major errors in the plan precluded accomplishment of the stated objective.

3.4.2. Area 42--Tactical Execution.

3.4.2.1. Q. Applied tactics consistent with the threat, current directives, and good judgment. Executed the plan and achieved mission goals. Quickly adapted to changing environment. Maintained situational awareness. Threat reactions were timely and correct.

3.4.2.2. Q-. Applied tactics with only minor deviations, omissions, and/or errors which degraded the reliable release of weapons or mission effectiveness but did not prevent the successful accomplishment of the overall mission goal. Slow to react to a changing environment. Situational awareness and timely threat reactions were poor.

3.4.2.3. U. Unable to accomplish the mission due to major errors or omissions during execution of the tactical plan. Situational awareness lost. Numerous threat reactions were omitted or incorrect. Failed to accomplish countermeasures or perform maneuvers to counter threat.

3.4.3. Area 43—Ground Control Intercept (GCI)/Airborne Warning and Control System (AWACS)/Composite Force (CF) Interface (If applicable).

- 3.4.3.1. Q. Effectively planned for and used CF assets to enhance mission and achieve objectives. No confusion between GCI/AWACS/CF and bombers.
- 3.4.3.2. Q-. Minor confusion between CF assets and threat aircraft. Less than optimum use of CF assets that did not affect the bomber's offensive advantage.
- 3.4.3.3. U. Inadequate or incorrect use of CF assets resulted in loss of offensive potential.
- 3.4.4. Area 44--Radio Transmission/Interphone-Usage and Discipline.
- 3.4.4.1. Q. Communications (both inter- and intra-cockpit) were concise, accurate, and effectively used to direct maneuvers or describe the tactical situation.
- 3.4.4.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness or mission accomplishment. Extraneous comments over radios/interphone presented minor distractions.
- 3.4.4.3. U. Communications over radios/interphone were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from situational awareness or mission accomplishment.
- 3.4.5. Area 45--Ingress (includes routing into threat area).
- 3.4.5.1. Q. Aware of all known/simulated threats and defenses. Employed effective use of route and altitude selection.
- 3.4.5.2. Q-. Ignored some of the known/simulated threats and defenses. Improper use of route and altitude selection resulted in unnecessary exposure.
- 3.4.5.3. U. Failed to honor known/simulated threats and defenses significantly reducing survivability. Failed to employ effective route or altitude threat deconfliction.
- 3.4.6. Area 46--Low Altitude Navigation (includes activity from the start descent point for the low altitude route through the route exit fix) (If applicable).
- 3.4.6.1. Q. Procedures and checklists required by the flight manual and governing directives were accomplished accurately and efficiently. Altitude deviations did not exceed +/-150 feet from published or briefed altitude. FLIP AP/1B route width was not exceeded. Made all low level enroute points and control times within briefed tolerances.
- 3.4.6.1.1. (DSN) . Advised pilot of altitude deviations prior to exceeding +/-150 feet of published or briefed altitude.
- 3.4.6.2. Q-. Minor deviations, omissions and errors were noted. Altitude deviations exceeded +/-200 feet from published or briefed altitude.
- 3.4.6.2.1. (DSN) . Advised the pilots of altitude deviations prior to exceeding +/-200 feet of from published or briefed altitude.
- 3.4.6.3. U. Exceeded Q- standards. Failed to remain within FLIP AP1/B route width limits. Low level points and control times were outside published or briefed tolerances.
- 3.4.7. Area 47--TA-Integrated EVS/Visual Procedures (If applicable)--(P/CP/DSN).
- 3.4.7.1. Pilots.

3.4.7.1.1. Q. P roperly interpreted scope. No obstacles displayed above the horizontal reference line, or horizontal reference line was not maintained above the trace (except for dropout techniques) for longer than two consecutive scans (prior to initiating necessary corrective action during TA operations). TA trace, radar altimeter, timing, or EVS/visual integration procedures (as applicable) were properly followed. During integrated EVS/visual operations, all turns were visually monitored.

3.4.7.1.1.1. Radar altitude +200/-150.

3.4.7.1.1.2. Airspeed +/-15 KIAS (non-mountainous); +/-20 KIAS (mountainous).

3.4.7.1.2. Q-. Properly interpreted scope. No obstacles displayed above the horizontal reference line, or horizontal reference line was not maintained above the trace (except for dropout techniques) for longer than three consecutive scans (prior to initiating necessary corrective action during TA operations). TA trace, radar altimeter, timing, or EVS/visual integration procedures (as applicable) were properly followed. During integrated EVS/visual operations all turns were visually monitored. Some difficulty interpreting scope.

3.4.7.1.2.1. Radar altitude +250/-200 ft.

3.4.7.1.2.2. Airspeed +/-20 KIAS (non-mountainous); +/-25 KIAS (mountainous).

3.4.7.1.3. U. Exceeded Q- standards.

3.4.7.2. Offense.

3.4.7.2.1. Q. Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently. Used correct clearance plane setting for the route segment flown. Compensated the TA system accurately for safe, efficient TA operations, and determined the TA compensation value within .2 degrees. Updated and maintained the Fuselage Reference Line (FRL) setting within .3 degrees when FRL mode was used. Coordination with the pilots provided accurate terrain assessment along the flight path of the aircraft. Advised the pilots of altitude deviations of +200/-150 ft from the planned clearance plane altitude. Advised pilots of airspeed deviations of +/-15 KIAS (non-mountainous); +/-20 KIAS (mountainous). If applicable, chose and communicated the most effective use of terrain for masking purposes within the route boundaries.

3.4.7.2.2. Q-. Compensated the TA system accurately for safe, efficient TA operations and determined the TA compensation value within .3 degrees. Updated and maintained the FRL setting within .5 degrees when FRL was used. Advised the pilots of altitude deviations of +250/-200 ft from the planned clearance plane altitude. Advised pilots of airspeed deviations of +/-20 KIAS (non-mountainous); +/-25 KIAS (mountainous).

3.4.7.2.3. U. Exceeded Q- standards.

3.4.8. Area 48—Weapon(s) Employment.

3.4.8.1. General.

3.4.8.2. Q. Weapon(s) employment must be accomplished within specified release parameters for the type of weapon being released or mission directives. (T-2). Accomplished procedures and checklists prescribed by the flight manual, weapons manual, and governing directives to pre-arm, prepare for release, arm and release all weapons accurately and efficiently or resulted in a properly aligned missile that would have struck within published reliability standards for that missile. Properly configured weapon(s) for release, and correctly analyzed malfunctions. Time Over Target (TOT) within +/- 2.5 minutes of scheduled or briefed time and did not exceed the published timing tolerance (i.e. refueling or military training routes). Correctly transferred or simulated transfer of required fuel for external weapons releases.

3.4.8.3. Q-. Weapon(s) employment accomplished with only minor deviations, omissions, and/or errors. All release parameters were met, safety was not compromised, and successful weapon(s) employment objectives were not jeopardized. Failed to correctly transfer or simulate transfer of required fuel for external weapons releases; however, aircraft CG limits were not/would not have been exceeded. TOT within +/- 5 minutes of scheduled or briefed time and did not exceed the published timing tolerance (i.e. for refueling or military training routes)

3.4.8.4. U. Exceeded Q- standards. The overall grade for bombing will be unqualified when any of the following occur. (T-2).

3.4.8.4.1. Failed to release/launch a weapon(s) (except for unavoidable system malfunctions).

3.4.8.4.2. Failed to release weapon(s) in the proper configuration.

3.4.8.4.3. Failed to recognize an obvious malfunction adversely affecting weapon employment capability.

3.4.8.4.4. Failed to transfer or simulate transfer of required fuel for external weapon(s) releases; aircraft CG limits were/would have been exceeded.

3.4.8.4.5. Aborted, downgraded, or changed the planned weapon(s) release without a valid reason.

3.4.8.4.6. Failed to achieve weapon(s) minimum release and safe escape parameters for specific weapons planned, or track tolerances for weapon(s) delivery was exceeded.

3.4.8.4.7. Attempted or released weapon(s) in contradiction with the mission directives/SPINS.

3.4.8.5. Unguided Weapon(s) Delivery Procedures--(P/CP/DSN) (if applicable).

3.4.8.5.1. Q. Correctly released the weapon(s) within the planned delivery parameters. Airspeed, altitude and roll rate steady prior to release. Followed current procedures and guidance during the weapon(s) delivery. Correct target coordinates entered, and target data verified IAW with aircrew manuals and applicable directives. System accuracy valid IAW theater Rules of Engagement (ROE). Flight Command Indicator (FCI) within briefed tolerances.

3.4.8.5.1.1. (DSN) . Crosshair placement for gravity release(s) was within reliability criteria. The navigator noted and advised the radar navigator of apparent crosshair placement errors and/or equipment configurations adversely impacting reliability.

3.4.8.5.2. Q-. Minor errors resulting in release outside the planned weapon(s) delivery parameters degraded weapon(s) effectiveness. Errors in airspeed, altitude or roll control degraded delivery accuracy. Minor errors in weapon(s) delivery procedures degraded weapon(s) effectiveness. FCI error would have resulted in minor degradation in weapon(s).

3.4.8.5.3. U. Improper release parameters resulted in weapon(s) being delivered outside weapon(s) limits. Incorrect target coordinates entered. Failed to verify target data. Failed to use proper procedures, which caused desired weapon(s) effects to miss the target. Major errors in execution of weapon(s) delivery. FCI error would have resulted in weapon(s) ineffectiveness.

3.4.8.6. Guided Weapon(s) Delivery Procedures--(P/CP/DSN) (If applicable).

3.4.8.6.1. Q. Correctly released the weapon(s) within planned delivery parameters. Followed all current procedures and guidance during the weapon(s) delivery.

3.4.8.6.1.1. (DSN) . The navigator noted and advised the RN of apparent equipment configurations adversely impacting reliability. Properly entered target data and weapons parameters in OAS and verified target data IAW with aircrew manuals and AFI 11-214.

3.4.8.6.2. Q-. Minor errors resulting in release outside the planned weapon(s) delivery parameters and degraded weapon(s) effectiveness. Mission planning errors resulted in degraded weapon(s) effectiveness. Minor errors in weapon delivery procedures degraded weapon(s) effectiveness.

3.4.8.6.2.1. (DSN) . Minor errors or deviations in checklist procedures. Errors in target data input or weapons configuration impacted reliability.

3.4.8.6.3. U. Major errors or deviations in checklist procedures and/or target data entry and weapons parameters in OAS. Failed to verify target data. Improper release parameters resulted in the weapon(s) being delivered outside weapon(s) limits. Failed to use proper procedures, which caused the desired weapon(s) effects to miss the target. Major errors in execution(s) of weapon delivery procedures.

3.4.8.7. Laser Guided Bomb (LGB) Delivery Procedures (P/CP/DSN) (If applicable).

3.4.8.8. Q. Correctly released the LGB within planned delivery parameters. Used proper lasing procedures to optimally guide the LGB (self-lasing). Followed all current procedures and guidance during the LGB delivery and recovery.

3.4.8.9. Q-. Minor errors resulted in release outside the planned LGB delivery parameters degraded weapons effectiveness. Minor errors in LGB delivery and recovery procedures, or lasing procedures (self-lasing) degraded weapons effectiveness.

3.4.8.10. U. Failed to use proper release parameters, which resulted in the LGB being delivered outside weapon(s)/seeker limits. Used improper lasing procedures, which

caused desired weapon(s) effects to miss the target (self-lasing). Major errors in execution of LGB delivery and/or recovery procedures.

3.4.9. Area 49--Weapons Employment Command and Control (If applicable).

3.4.9.1. Q. Effective coordination with outside agencies and contract execution within the flight resulted in prompt employment IAW the ROE, given restrictions or the tactical situation.

3.4.9.2. Q-. Minor errors during contract execution or slow/confused coordination with outside agencies resulted in delayed employment IAW the ROE, given restrictions or the tactical situation.

3.4.9.3. U. Major errors during contract execution or ineffective coordination with outside agencies resulted in employment outside the ROE, given restrictions or the tactical situation.

3.4.10. Area 50--Targeting Pod Operation (If applicable)--(DSN): The Radar Navigator position is responsible for Targeting Pod Operation.

3.4.10.1. Q. Correctly operated the sensor to acquire the target. Was able to properly operate the sensor controls to identify target and deliver weapons.

3.4.10.2. Q-. Poor sensor operation hindered target identification, which degraded weapons delivery. Did not thoroughly understand system controls.

3.4.10.3. U. Improper search techniques resulted in late or no target acquisition. Improper sensor operation created an unusable picture and prevented target identification or weapons delivery.

3.4.11. Area 51--Range Procedures.

3.4.11.1. Q. Used proper procedures for entering and exiting the range. Range operations followed established procedures.

3.4.11.2. Q-. Minor deviations from established procedures for range entry, exit, or operations.

3.4.11.3. U. Major deviations from established procedures for range entry, exit, or operations.

3.4.12. Area 52--Egress.

3.4.12.1. Q. Effectively used evasive maneuvers, terrain masking and/or altitude selection to complete an expeditious egress from the target area. Formation join-up was accomplished as soon as possible without undue exposure to enemy defenses.

3.4.12.2. Q-. Egress contributed to unnecessary exposure to threats and delayed formation join-up and departure from the target area.

3.4.12.3. U. Egress resulted in excessive exposure to threats. Formation join-up was not accomplished or resulted in excessive exposure to threats.

3.4.13. Area 53--Training Rules/ROE.

3.4.13.1. Q. Adhered to and knowledgeable of all training rules/ROE.

3.4.13.2. Q-. Committed minor deviations, omissions, and/or errors. Made timely and positive corrections. Did not jeopardize safety of flight.

3.4.13.3. U. Committed significant deviations indicating a lack of knowledge of training rules/ROE.

3.4.14. Area 54--(E) Threat Identification.

3.4.14.1. Q. All direct threat/TAR signals were correctly identified in a timely manner. All indirect signals were identified as appropriate for the situation.

3.4.14.2. Q-. All threat signals were correctly identified with only minor delays that did not affect the mission. Indirect signal(s) were initially identified as a threat/TAR but corrected in a timely manner.

3.4.14.3. U. Failed to identify threat signals correctly without adverse delay. Identified an indirect threat as a direct threat/TAR.

3.4.15. Area 55--(E) Penetration Procedures (Takeoff through last weapon[s] release).

3.4.15.1. Q. Accomplished initial equipment settings IAW applicable mission materials and verified using the Equipment Set checklist. Accomplished receiver monitoring and procedures IAW governing directives.

3.4.15.2. Q-. Accomplished procedures with only minor deviations, omissions or errors, which demonstrated minimum acceptable knowledge/performance of the flight manual or governing directives.

3.4.15.3. U. Accomplished procedures with major deviations, omissions, and/or errors , which demonstrated unacceptable knowledge / performance of the flight manual or governing directives.

3.4.16. Area 56--(E) Expendable Procedures.

3.4.16.1. Q. Accomplished procedures in a timely manner and IAW flight manual and governing directives, with only minor deviations, omissions, and/or errors.

3.4.16.2. Q-. Applied countermeasures in a timely manner with only minor deviations, omissions, and/or errors , which resulted in significantly less than optimum effectiveness or demonstrating minimal acceptable knowledge of the flight manual or governing directives.

3.4.16.3. U. Accomplished procedures with deviations, omissions or errors, which demonstrated unacceptable knowledge of the flight manual or governing directives.

3.4.17. Area 57--(E) Threat Counter-Measures. This area is used to grade countermeasures against direct threat radars/TARs (fighter, Surface-to-Air Missile [SAM], Anti-Aircraft Artillery [AAA] and naval threats).

3.4.17.1. Q. Correctly applied countermeasures in a timely manner IAW governing directives.

3.4.17.2. Q-. Applied timely countermeasures with only minor deviations, omissions, and/or errors.

3.4.17.3. U. Late or misapplied countermeasures for threat(s) encountered. Failed to make threat or maneuver calls, or calls were unreadable. Failed to counter a direct threat.

3.4.18. Area 58--(E) Acquisition/Communication Countermeasures. This area consists of all actions taken against indirect threat radars and communications facilities.

3.4.18.1. Q. Correctly applied countermeasures against acquisition/communication facilities IAW flight manual and governing directives. Other countermeasures were accurate and timely.

3.4.18.2. Q-. Applied countermeasures with only minor deviations, omissions, and/or errors.

3.4.18.3. U. Failed to correctly employ acquisition/communications countermeasures.

3.4.19. Area 59--(E) Withdrawal Procedures. This phase includes all actions (except in response to a direct threat) after the last weapon release until the TCM point.

3.4.19.1. Q. Accomplished all procedures required by the flight manual and governing directives.

3.4.19.2. Q-. Withdrawal actions were incomplete or accomplished with only minor deviations, omissions, and/or errors.

3.4.19.3. U. Failed to accomplish/demonstrate required actions and knowledge of procedures during withdrawal from the threat area.

3.4.20. Area 60 Emissions Control (EMCON) Procedures (P/CP/DSN/E).

3.4.20.1. Q. Applied proper EMCON procedures as directed by the employment scenario to degrade enemy detection, identification, and acquisition ability.

3.4.20.2. Q-. Applied EMCON procedures with minor deviations and/or errors that may have resulted in enemy detection, identification, or acquisition but not affected mission accomplishment.

3.4.20.3. U. Applied EMCON procedures with major deviations and/or errors that prevented successful mission accomplishment.

3.4.21. Areas 61-99--Not used.

3.5. Emergency Procedures (Emergency Procedures Evaluations).

3.5.1. Area 201-209--boldface Procedures.

3.5.1.1. Q. Displayed correct, immediate response to applicable boldface.

3.5.1.2. U. Incorrect response for applicable boldface.

3.5.2. Area 210-273--Non-boldface Procedures.

3.5.2.1. Q. Recognized and analyzed malfunctions in a timely manner. Displayed correct, immediate response to emergency situations. Effectively used checklist.

3.5.2.2. Q-. Slow to recognize and/or analyze malfunctions. Response to certain required steps in emergency procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data and implement guidance.

3.5.2.3. U. Failed to analyze problems or take corrective action. Failed to use checklist and/or lacked acceptable familiarity with its arrangement or contents.

3.5.3. Area 266--Unusual Attitude Recoveries—(P/CP) (Simulator only).

3.5.3.1. Q. Smooth, positive recovery to level flight with correct recovery procedures.

3.5.3.2. Q-. Slow to analyze attitude, or erratic in recovery to level flight. Correct recovery procedures used.

3.5.3.3. U. Failed to determine attitude. Failed to use proper recovery procedures.

3.5.4. Area 301-302—Weapon(s) Jettison and Malfunctions

3.5.4.1. Area 301—Weapon(s) Jettison--(P/CP/DSN).

3.5.4.1.1. Q. Accomplished jettison procedures and/or checklist items without any deviations.

3.5.4.1.2. Q-. Accomplished jettison procedures and/or checklist items with only minor deviations, omissions, and/or errors.

3.5.4.1.3. U. Exceeded Q- standards. Committed major procedural and/or checklist deviations, omissions, and/or errors that could preclude effective weapons delivery or result in an improper weapons load.

3.5.4.2. Area 302--Weapon Malfunction--(DSN).

3.5.4.2.1. Q. Recognized and analyzed malfunction in a timely manner. Effectively used technical order procedures.

3.5.4.2.2. Q-. Slow to recognize and/or analyze malfunction. Used the technical order when appropriate, but slow to locate required data and implement guidance.

3.5.4.2.3. U. Failed to analyze problems or take corrective action. Failed to use checklist and/or lacked acceptable familiarity with its arrangement or contents.

Chapter 4

EMERGENCY PROCEDURES EVALUATIONS

4.1. General.

4.1.1. Emergency Procedures Evaluation. Pilot and DSN EPEs will be conducted IAW paragraph 4.1.4. (T-2). If unable to schedule an integrated EPE, Electronic Warfare Officers may conduct QUAL/MSN EPEs in an ATD or verbally to include all boldface procedures and a sampling of non-boldface procedures. EPEs should be scheduled to allow enough time for all compartments to complete their respective evaluation requirements. Only flight examiners may conduct EPEs. Grading criteria for each required item are listed in [chapter 3](#).

4.1.1.1. 36 Operations Group permanent party personnel may accomplish required EPEs verbally due to the unavailability of assets at Anderson AFB, Guam.

4.1.2. Units may include additional items in the unit supplement to AFI 11-202v2, as required.

4.1.3. Examinees receiving an overall unqualified grade will be placed in supervised status until recommended additional training is completed and/or a re-evaluation is successfully accomplished. (T-2). Examinees receiving an overall unqualified grade because of an unsatisfactory boldface accomplishment will not be permitted to fly until a successful re-evaluation is accomplished. (T-2). For EPEs in which the examinee is qualified, but requires additional training, the additional training will be accomplished before the next flight. (T-2). Additional training and re-evaluations will be accomplished IAW AFI 11-202V2. (T-2).

4.1.4. QUAL EPE.

4.1.4.1. Pilots will accomplish QUAL EPEs in the WST/CPT to include all boldface procedures and a sampling of Non-boldface procedures. (T-2).

4.1.4.2. DSNs will accomplish QUAL EPEs in the WST concurrently with the MSN EPE, to include (at a minimum) all boldface procedures. (T-2).

4.1.5. MSN EPE.

4.1.5.1. Pilots will be evaluated on nuclear or conventional weapons jettison procedures. (T-2).

4.1.5.2. DSNs will be evaluated on nuclear or conventional weapons malfunction analysis and jettison procedures. (T-2). As a minimum, weapons malfunction analysis will include a programmable weapon (e.g., JDAM, JASSM, ALCM). (T-2).

4.2. General Grading Standards. Use all sections for criteria applicable to the events performed on the evaluation. See chapter 3 for area-specific grading criteria.

4.3. Information Collection and Records.

4.3.1. Information Collections. No information collections are created by this publication.

4.3.2. Records. The program records created as a result of the processes prescribed in this publication are maintained in accordance with AFMAN 33-363 and disposed of in accordance with the Air Force Records Disposition Schedule (AF RDS).

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Deputy Chief of Staff for Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Executive Order 9397 as amended by Executive Order 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*, (date)

AFI 11-2B-52V1, *B-52 Aircrew Training*, (Date)

AFI 11-2B52V3, *B-52—Operations Procedures*, (Date)

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, (Date)

AFMAN 11-210, *INSTRUMENT REFRESHER PROGRAM (IRP)*, (Date)

AFI 11-214, *Air Operations Rules and Procedures*, (Date)

AFI 11-415, *Weapons and Tactics Program*, (Date)

AFPD 10-9, *Lead Operating Command Weapon System Management* (Date)

AFPD 11-2, *Aircraft Rules and Procedures*, (Date)

AFI 33-360, *Publications and Forms Management*, (Date)

AFMAN 33-363, *Management of Records*, (Date)

AFMAN 11-217, *Instrument Flight Procedures*, (Date)

AFTTP 3-3.B-52, *B-52 Combat Aircraft Fundamentals*, (Date)

Adopted Forms

AF Form 8, *Certificate of Aircrew Qualification*

AF Form 847, *Recommendation for Change of Publication*

AF Form 942, *Record of Evaluation*

AF Form 4348, *USAF Aircrew Certifications*.

Abbreviations and Acronyms

A3—Director of Operations

A3BT—Director of Air and Space Operations, Training, Standardization and Evaluation

AAA—Anti Aircraft Artillery

AEF—Air and Space Expeditionary Force

AF—Air Force

AFFSA—Air Force Flight Standards Agency

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFRC—Air Force Reserve Command

AFGSC—Air Force Global Strike Command
AFI—Air Force Instruction
AFPD—Air Force Policy Directive
ALCM—Air-Launched Cruise Missile
ANG—Air National Guard
ARMS—Aviation Resource Management Systems
AFRC—Air Force Reserve Command
AR—air refueling
ASR—Airport Surveillance Radar
ATD—Aircrew Training Device
AWACS—Airborne Warning and Control System
BMC—Basic Mission Capable
CALCM—Conventional Air-Launched Cruise Missile
CC—Commander
CF—Composite Force
CP—Co-Pilot
CPT—Cockpit Procedures Trainer
CMR—Combat Mission Ready
CRM—Cockpit/Crew Compartment/Crew Resource Management
DEG—Degree
DH—Decision Height
DOC—Designed Operational Capability
DSN—Dual Seat Navigator
E—Electronic Warfare Officer
EA—Electronic Attack
ECM—Electronic Counter Measure
EFB—Electronic Flight Bag
EMCON—Emissions Control
EP—Emergency Procedures
EPE—Emergency Procedures Evaluation
EVS—Electro-Optical Viewing System
EW—Electronic Warfare Officer

FE—Flight Examiner
FCI—Flight Command Indicator
FCIF—Flight Crew Information File
FLIP—Flight Information Publication
FRL—Fuselage Reference Line
FTU—Formal Training Unit
GCI—Ground Control Intercept
GP—General Purpose Bomb
HQ—Headquarters
HHQ—Higher Headquarters
IAW—In Accordance With
IE—Instructor Electronic Warfare Officer
IFF—Identification Friend or Foe
ILS—Instrument Landing System
IP—Instructor Pilot
IN—Instructor DSN
INSTM—Instrument
JASSM—Joint Air-to-Surface Stand-off Missile
JDAM—Joint Direct Attack Munition
KIAS—Knots Indicated Airspeed
LGB—Laser-Guided Bomb
MAJCOM—Major Command
MALD—Miniature Air Launched Decoy
MAP—Missed Approach Point
MQF—Master Question File
MDA—Minimum Descent Altitude
MSN—Mission
MUTES—Multiple Threat Emissions Systems
N—Navigator
N/A—Not Applicable
NAF—Numbered Air Force
N/N—No-Notice

NUP—Navigator Upgrade Program
OAS—Offensive Avionics System
OG—Operations Group
OGV—Operations Group Standardization/Evaluation
OPR—Office of Primary Responsibility
P—Pilot
PAR—Precision Approach Radar
PUP—Pilot Upgrade Program
Q—Qualified
QUAL—Qualification
R—Required
RDS—Records Disposition Schedule
RN—Radar Navigator
ROE—Rules of Engagement
SAM—Surface to Air Missile
SIF—Selective Identification Feature
SIM—Simulator
SPINS—Special Instructions
STAN/EVAL—Standardization/Evaluation
TA—Terrain Avoidance
TAR—Target Acquisition Radar
TCM—Terminate Counter Measures
TERPS—Terminal Instrument Procedures
TOT—Time Over Target
U—Unqualified
VDP—Visual Descent Point
VFR—Visual Flight Rules
WCMD—Wind-Corrected Munitions Dispenser
WR—War Reserve
WST—Weapons System Trainer

Terms

Additional Training—Any training recommended by flight examiner to remedy deficiencies identified during an evaluation that must be completed by a specific due date. This training may include ground instruction, ATD, simulator or flying. Additional training must include a demonstration of satisfactory knowledge or proficiency to flight examiner, supervisor or instructor (as stipulated in the Additional Training description) to qualify as completed.

Aircrew Training Device (ATD)—A training platform suitable to conduct evaluations.

Certification—Procedure used to document competency in a particular task. Not interchangeable with —qualification, which requires Form 8/8a documentation.

Crew Resource Management (CRM)—The effective use of all available resources--people, weapon systems, facilities, equipment, environment--by individuals or crews to safely and efficiently accomplish an assigned mission or task.

Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Performing action(s) out of sequence due to unusual or extenuating circumstances is not considered a deviation. In some cases, momentary deviations may be acceptable; however, cumulative momentary deviations will be considered in determining the overall qualification level.

Emergency Procedures Evaluation (EPE)—A flight, ATD, SIM or verbal evaluation used to evaluate emergency procedures and systems knowledge.

Flight Crew Information File (FCIF)—A collection of publications and material determined by the MAJCOM and unit as necessary for day-to-day operations.

Flight Examiner—An aircrew member designated to perform evaluation duties as specified by this instruction. Flight examiners must be qualified in the events they evaluate (*EXCEPTION*: SPOT evaluations). (T-2). *Unit Flight Examiners* include squadron flight examiners assigned to the flying squadron, OGV flight examiners assigned to the OGV but attached to the flying squadron and other wing individuals tasked with flight examiner duties assigned above the squadron level. A *HHQ Flight Examiner* is a flight examiner assigned to a NAF or MAJCOM. *Senior Flight Examiners* are senior flying commanders – specifically, flying NAF/CCs and OG/CCs (and/or, their deputies) – that act in the capacity of flight examiners.

Major Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Deviation detracted from mission accomplishment, adversely affected use of equipment, or violated safety. Performing action(s) out of sequence due to unusual or extenuating circumstances is not considered a deviation. In some cases, momentary deviations may be acceptable; however, cumulative momentary deviations will be considered in determining the overall qualification level.

Major Error—Departure from standard procedures. Performing incorrect actions or recording incorrect information. Error detracted from mission accomplishment, adversely affected use of equipment, or violated safety.

Major Omission—To leave out a required action or annotation. Omission detracted from mission accomplishment, adversely affected use of equipment, or violated safety.

Minor Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Deviation did not detract from mission accomplishment, adversely affect use of equipment, or violate safety.

Minor Error—Departure from standard procedures. Performing incorrect actions or recording incorrect information. Error did not detract from mission accomplishment, adversely affect use of equipment, or violate safety.

Minor Omission—To leave out a required action or annotation. Omission did not detract from mission accomplishment, adversely affect use of equipment, or violate safety.

Mission Evaluation—Qualifies an aircrew member to employ the member's assigned weapon system in accomplishing the unit's operational or DOC statement mission. Requires AF Form 8/8a documentation.

Omission—To leave out a required action or annotation.

Requisites—Requirements such as exams, EPEs, Boldface/CAPs, etc., that have to be accomplished before an evaluation is considered complete. Requires AF Form 8/8a documentation.

SPOT Evaluation—An evaluation other than one used to satisfy the requirements of a periodic, initial instructor or requalification instructor evaluation. May be no-notice. Requires AF Form 8/8a documentation.

Qualification Evaluation—Qualifies an aircrew member to perform the duties of a particular crew position in the specified aircraft. Requires AF Form 8/8a documentation.

Unit—A level of organization under HHQs (MAJCOM and/or NAF) required to establish a Stan/Eval function, which is normally an operations group and consists of both the group and flying squadrons.